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ANNUAL ISSUE

NPN
National Petroleum News

1983 fact book

Marketing Management Listing · Share of Market Data
Company-by-Company Distribution · Heating Oil Market
Data · Price and Market Reports · Retail Outlet Network

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NPN
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Ranking The Top Marketing Companies

Corporate earnings took another beating in 1982 as glutted marketplaces and diminishing consumption took their toll. This doesn't mean that companies did not make money in that 12-month period. That they did. But they did not make as much in 1982 as they had the year before. And, they were nowhere near the lush years of 1978-80 when profits leaped skyward.

Minus signs dominated the year-end reports of most of the top 20 oil companies. Only a few—notably Union Oil and Atlantic Richfield in the heavyweight division and Tenneco and Diamond Shamrock down the line—were on the plus side.

The "billionaire's club," the elite group of oil companies with annual earnings in excess of $1-billion, lost two of its members in the 1982 scramble. Gulf, with a 26% slump in its 1982 profits, dropped to the $900-million level. Sun, which had just squeaked into the club in 1981 with $80-million to spare, saw its profits dip 50% in 1982 to a little more than $500-million.

Current members of the "club" are Exxon, Mobil, Texaco, Standard of California, Standard of Indiana, Shell, Atlantic Richfield and Standard of Ohio, in that descending order (See next several pages for detail reports on the various companies).

Cities Service Co., besieged by a Texas suitor of whom it wanted no part, found an unexpected white knight in Occidental Petroleum Corp., a multi-billion-dollar international producer based in Los Angeles. Occidental, interested only in Citgo's domestic reserves of crude oil and natural gas and its unexplored acreage, quickly sold off the gas company. Then early in 1983 it also sold Citgo's marketing and refining facilities to The Southland Corp., the big C-store chain which is now ranked as the nation's biggest independent gasoline marketer.

Thus, one more familiar face disappeared from the national scene, joining Conoco and Marathon which were merged into DuPont and U.S. Steel Corp., respectively, in earlier merger battles. Neither Conoco nor Marathon published separate revenues and earnings statistics for the year 1982. They were rolled in with their new corporate owners and buried in the masses of financial data.

There were some significant changes in the pecking order of the companies at the end of 1982. *NPN* uses company assets as its yardstick since sales and earnings vary from year to year and cannot be considered good measuring tools. All of the companies in the listing have assets of $1-billion or more. Exxon is by far the titan of them all with assets of $62.2-billion. Mobil retained its iron grip on the No. 2 position while Texaco, even though it has been retrenching madly, remained in third place. Standard of Indiana bettered itself and crawled past Standard of California to become No. 4. Similarly, Atlantic Richfield leapfrogged over both Shell and Gulf to lay claim to being the sixth largest oil company in the land.

The service station population dwindled anew in 1982, dropping from 151,250 at the end of 1981 to 144,690 at the end of 1982. The outlook is that the total will decline further in 1983, hitting a new low of 139,250 by next Dec. 31.

	Total Assets		Net Income		Net Sales Ranking Among 500 U.S. Corporations (a)	
	1982	1981	1982	1981	1982	1981
Exxon Corp.	1	1	1	1	1	1
Mobil Oil Corp.	2	2	6	2	3	2
Texaco Inc.	3	3	8	4	4	4
Standard Oil (Indiana)	4	5	3	6	10	7
Standard of California	5	4	7	3	7	5
Atlantic Richfield Co.	6	8	4	8	12	10
Shell Oil Co.	7	7	5	7	13	13
Gulf Oil Corp.	8	6	9	9	9	9
Tenneco Oil Co. (b)	9	17	10	20	19	16
Standard Oil (Ohio)	10	9	2	5	21	21
Phillips Petroleum	11	11	13	11	17	15
Sun Co.	12	10	14	10	18	17
Getty Corp.	13	12	12	12	24	23
Union Oil Co. of California	14	13	11	13	28	27
Amerada-Hess Corp.	15	14	18	16	40	33
Ashland Oil Inc. (c)	16	18	17	19	36	35
Kerr-McGee Corp.	17	19	15	17	99	101
Diamond Shamrock	18	20	16	15	121	112
Murphy Oil Corp.	19	21	19	18	151	167
American Petrofina Co.	20	22	20	21	171	164
Crown Central Petroleum Corp.	21	—	21	—	197	—

Note: Cities Service and Marathon have been dropped from this report due to mergers with Occidental Petroleum and U.S. Steel, respectively. Neither issued separate reports in 1982. Conoco was dropped in 1982 after it was merged into DuPont.

(a) As ranked by Fortune's 500 leading companies, May 2, 1983; (b) Corporate but includes Tenneco Oil as a division; (c) Fiscal year ends Sept. 30.

Source: Fortune Magazine, May 2, 1983.

1982-1981 Changes in Profits

Industry Medians	% Change
Petroleum refining	−14.9%
Mining, crude oil production	−47.5
Metal manufacturing	−100.0
Aerospace	−30.9
Paper, fiber & wood products	−39.1
Office equipment (incl. computers)	8.9

(Petroleum refining ranked second in 1980 with a 25.4% increase; in 1981 it dropped to −7.6%.)

Return on Sales

Industry Medians	% Growth 1982	1981
Pharmaceuticals	9.9%	9.1%
Publishing, printing	6.5	7.1
Measuring, scientific, photographic equipment	5.9	6.9
Office equipment (incl. computers)	5.9	6.1
Petroleum refining	4.0	4.4
Mining, crude oil production	3.0	11.7
Tobacco	NA	7.9
All industries	**3.6**	**4.6**

(Petroleum refining ranked ninth with 5.5% in 1980; 14th with 4.4% in 1981.)

Return on Stockholders' Equity

Industry medians	% Growth 1982	1981
Pharmaceuticals	16.9%	18.0%
Publishing, printing	15.5	16.4
Measuring, scientific, photographic equipment	12.8	15.6
Petroleum refining	12.5	16.4
Office equipment (incl. computers)	12.4	13.3
Mining, crude oil production	9.0	17.6
All industries	**10.9**	**13.8**

(Petroleum refining ranked 3rd in 1980 with 19.4%; 6th in 1981 with 16.4%.)

Source: Fortune 500 largest corporations, May, 1983.

Oil Company Annual

Company	Gross Sales-Operating Revenues (a) (Add 000) 1982	Gross Sales-Operating Revenues (a) (Add 000) 1981	% Change 1982 vs. 1981	% Change 1982 vs. 1977	Net Income (Add 000) 1982	Net Income (Add 000) 1981
Amerada Hess Corp.	$ 8,394,085	$ 9,443,630	−11.1%	81.6%	$ 168,662	$ 212,591
American Petrofina	2,242,445	2,504,038	−10.5	108.4	54,401	74,140
Ashland, Inc. (b)	9,109,879	9,506,564	−4.2	80.3	180,864	90,032
Atlantic Richfield Co.	26,990,557	28,208,255	−4.3	136.7	1,676,078	1,671,290
Cities Service Co. (c)	—	8,564,000	—	—	—	(49,200)
Diamond Shamrock Corp. (d)	1,791,398	1,867,692	−4.1	183.8	249,785	308,362
Exxon Corp.	103,558,545	114,922,561	−9.9	93.3	4,185,932	4,826,215
Getty Oil Corp.	11,970,730	12,887,360	−7.1	237.8	691,590	856,865
Gulf Oil Corp.	30,630,000	30,461,000	0.6	71.7	900,000	1,231,000
Kerr-McGee Corp.	3,777,000	3,826,000	−1.2	74.5	209,764	211,117
Marathon Oil Co. (e)	9,098,431	9,219,991	−1.3	96.3	N.A.	343,059
Mobil Oil Corp.	60,969,000	65,458,000	−6.9	132.8	1,380,000	2,433,000
Murphy Oil Corp.	2,602,455	2,446,223	6.4	131.3	157,759	163,006
Phillips Petroleum Corp.	15,698,000	15,966,000	−1.2	149.7	646,000	879,000
Shell Oil Co.	20,214,000	21,739,000	−7.0	98.3	1,605,000	1,701,000
Standard Oil Co. of California	35,218,000	45,229,000	−22.1	61.9	1,377,000	2,380,000
Standard Oil Co. (Indiana)	28,073,000	29,947,000	−6.3	115.6	1,826,000	1,922,000
Standard Oil Co. of Ohio	13,529,000	14,140,000	−4.3	284.0	1,879,000	1,947,000
Sun Co.	16,258,000	16,430,000	−1.0	153.3	537,000	1,076,000
Tenneco (f)	14,979,000	15,066,000	−0.6	779.0	819,000	813,000
Texaco Inc.	48,019,000	59,297,000	−19.0	72.0	1,281.000	2,310,00
Union Oil Co. of California	10,390,400	10,745,900	−3.3	83.3	804,000	791,400

Company	Product Imports b/d 1982	Product Imports b/d 1981	Crude Imports b/d 1982	Crude Imports b/d 1981	Net Crude Production b/d Domestic (g) 1982	Net Crude Production b/d Domestic (g) 1981	Net Crude Production b/d Foreign 1982	Net Crude Production b/d Foreign 1981
Amerada Hess Corp.	—	—	—	—	76,519	82,357	76,311	73,745
American Petrofina	—	—	—	4,000	17,696	18,279	—	—
Ashland, Inc.	—	—	—	166,000	2,725	2,815	13,840	9,432
Atlantic Richfield Co.	—	—	—	—	607,400	539,900	35,300	32,800
Cities Service Co.	—	—	—	—	—	149,100	—	30,100
Diamond Shamrock Corp.	—	—	—	—	29,236	30,287	31	33
Exxon Corp.	—	—	—	—	740,000	752,000	2,359,000	3,044,000
Getty Oil Co.	—	—	—	—	279,900	277,700	142,700	145,900
Gulf Oil Co.	21,000	21,600	238,800	245,700	328,700	345,400	715,700	742,900
Kerr-McGee Corp.	—	—	—	—	20,400	20,100	15,100	8,700
Marathon Oil Co.	—	—	172,000	167,000	160,100	165,874	74,800	64,912
Mobil Oil Corp.	11,000	10,000	161,000	136,000	309,000	316,000	268,000	274,000
Murphy Oil Corp.	—	—	8,032	26,671	14,722	13,992	49,926	47,577
Phillips Petroleum Corp.	—	—	39,900	8,600	260,000	268,000	125,300	141,000
Shell Oil Co.	—	—	238,000	256,000	519,000	514,000	27,000	23,000
Standard Oil Co. of California	31,700	51,700	149,800	136,300	332,100	341,600	149,800	136,300
Standard Oil Co. (Indiana)	17,000	14,000	278,000	292,000	409,000	437,000	357,000	357,000
Standard Oil Co. of Ohio	—	—	—	—	694,869	717,291	—	—
Sun Co.	—	—	—	—	212,093	217,321	29,559	27,433
Tenneco	—	—	—	—	82,010	83,101	38,039	26,349
Texaco Inc.	—	—	—	—	352,000	381,000	1,543,000	2,672,000
Union Oil Co. of California	—	—	41,000	67,000	168,800	165,800	71,300	70,300

(a) Excluding taxes.
(b) Fiscal year ends 9/30.
(c) Citgo was merged with Occidental Petroleum in late 1982 and its data for the year were not disclosed in Occidental's annual report.
(d) Earnings are "operating profits," not net income; also data are for Shamrock's oil and gas unit.

Reports for 1982

Net Income % Change		Net Income as % of Gross Sales		Total Assets (Add 000)		Total Assets % Change		Net Income as % of average stockholder equity	
1982 vs. 1981	1982 vs. 1977	1982	1981	1982	1981	1982 vs. 1981	1982 vs. 1977	1982	1981
-20.7%	-5.7%	2.0%	2.3%	6,145,303	6,321,581	-3.0%	105.0%	6.6%	8.5%
-26.6	39.6	2.4	3.0	1,166,022	1,146,081	1.7	36.5	9.7	13.7
101.0	10.1	2.0	1.0	4,210,481	4,121,813	2.1	61.3	17.3	9.3
0.3	138.7	6.2	5.9	21,632,775	19,732,539	9.6	94.6	18.1	20.8
—	—	—	—	—	6,048,500	—	—	—	—
-19.0	90.2	13.9	16.5	3,194,013	3,016,385	5.9	N.A.	N.A.	22.8
-13.3	72.7	4.0	4.2	62,288,550	61,547,957	1.2	62.0	14.6	17.4
-19.3	123.7	5.8	6.7	9,924,490	9,536,356	4.1	137.8	14.0	19.2
-26.9	19.7	2.9	4.0	20,436,000	20,429,000	—	43.7	9.1	12.3
-0.6	76.0	5.6	5.6	3,763,000	3,415,000	10.2	105.3	12.5	14.1
—	—	N.A.	3.5	9,623,771	5,993,623	60.1	178.5	N.A.	17.2
-43.3	36.9	2.3	3.7	36,439,000	34,776,000	4.8	110.4	9.4	17.6
-3.2	234.7	6.1	6.7	2,989,523	2,776,881	7.7	119.7	18.8	22.1
-26.5	25.0	4.1	5.5	12,097,000	11,264,000	7.4	107.2	11.5	16.9
-5.6	118.4	7.9	7.8	21,376,000	20,118,000	6.3	140.8	17.4	21.0
42.1	35.5	3.9	5.3	23,490,000	23,680,000	-0.8	58.5	10.6	20.0
-5.0	80.6	6.5	6.4	24,289,000	22,964,000	4.6	88.5	16.5	19.2
-3.5	938.0	13.5	13.8	16,016,000	15,743,000	1.7	54.5	10.6	11.1
-50.1	48.3	3.3	6.5	12,019,000	11,822,000	1.7	132.0	10.5	23.1
0.7	91.8	5.5	5.4	17,378,000	16,808,000	3.4	721.3	11.9	12.5
-44.5	37.8	2.7	3.9	27,114,000	27,489,000	-1.4	43.3	9.2	19.6
1.6	140.5	7.7	7.4	8,511,300	7,592,800	12.1	80.1	18.2	20.8

Refinery Crude Runs b/d Domestic		Refinery Crude Runs b/d Foreign		Total domestic production as % of total domestic runs		Domestic refined petroleum product sales b/d	
1982	1981	1982	1981	1982	1981	1982	1981
416,000	414,000	—	—	18.5%	19.8%	463,000	515,000
114,630	97,663	—	—	15.4	18.7	140,200	121,479
312,200	321,499	—	—	0.9	0.9	394,575	416,672
670,200	662,700	—	—	90.6	81.5	673,800	647,400
—	208,800	—	—	—	71.6	—	249,100
65,973	59,475	—	—	44.3	50.9	90,323	83,595
989,000	1,111,000	2,493,000	2,767,000	74.8	67.7	1,174,000	1,295,000
237,100	249,200	37,300	16,700	118.1	111.4	281,800	285,800
649,100	649,300	387,600	483,300	50.6	53.2	716,200	691,100
118,353	113,659	—	—	17.2	17.7	157,441	149,984
392,800	382,372	40,600	40,261	40.8	43.4	441,000	457,690
644,000	639,000	1,067,000	1,134,000	47.9	49.5	699,000	696,000
91,484	82,790	27,742	24,393	16.1	16.9	96,063	91,215
456,000	452,000	—	—	57.0	59.3	461,000	446,000
845,000	867,000	—	—	61.4	59.3	811,000	826,000
866,600	1,079,300	678,600	908,200	38.3	31.7	950,000	1,141,000
796,000	818,000	129,000	133,000	51.4	53.4	852,000	831,000
360,000	362,012	—	—	193.0	198.1	370,900	378,430
366,393	382,709	70,650	76,678	57.9	56.8	512,048	477,388
92,921	98,836	N.A.	142,034	88.2	84.1	132,486	142,034
694,000	836,000	1,101,000	1,375,000	50.7	45.6	805,000	901,000
363,900	372,400	—	—	46.4	44.5	364,200	365,300

(e) Income data were not disclosed by Marathon, now a division of Du Pont; also "crude imports" are tanker liftings of equity crude oil.
(f) Corporate return but includes Tenneco Coil Co.
(g) Includes natural gas liquids and liquid condensate.
Source: NPN questionnaires and annual reports.

Quarterly and Full Year Earnings—1982 vs. 1981

(Add 000,000)

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Full year 1982	Full year 1981	% Change
Exxon Corp.	$1,240.0	$885.0	$1,070.0	$1,482.0	$4,185.0	$4,826.0	(13.3%)
Mobil Oil Corp.	326.0	310.0	323.0	282.0	1,380.0	2,433.0	(43.3)
Texaco Inc.	143.0	305.0	303.0	306.0	1,281.0	2,310.0	(44.5)
Standard Oil Co. of California	230.0	263.0	459.0	425.0	1,380.0	2,380.0	(42.0)
Standard Oil Co. (Indiana)	470.0	382.0	559.0	415.0	1,826.0	1,922.0	(5.0)
Gulf Oil Corp.	267.0	210.0	146.0	226.0	900.0	1,230.0	(26.8)
Shell Oil Co.	345.0	380.0	442.0	438.0	1,610.0	1,700.0	(5.3)
Atlantic Richfield Co.	385.4	409.8	446.9	434.0	1,676.1	1,671.3	0.3
Standard Oil Co. (Ohio)	454.7	473.2	487.3	463.9	1,879.1	1,946.9	(3.5)
Sun Co.	124.0	110.0	152.0	151.0	537.0	1,080.0	(50.3)
Phillips Petroleum Co.	189.0	139.0	131.6	154.6	645.9	879.4	(26.6)
Getty Oil Co.	164.0	151.5	178.0	172.7	691.6	856.9	(19.3)
Union Oil Co. of California	168.5	197.6	212.8	225.0	804.0	791.0	1.6
Amerada Hess Corp.	(16.2)	61.1	80.1	43.6	168.7	212.6	(20.6)
Cities Service Co.	53.0	74.4	25.0	(a)	(a)	(a)	—
Marathon Oil Co.	(b)	(b)	(b)	(b)	(b)	(b)	—
Tenneco	129.0	204.0	198.0	288.0	819.0	813.0	0.7
Ashland, Inc. (c)	47.6	(11.6)	69.1	75.8	180.9	90.0	101.0
Kerr-McGee Corp.	29.2	50.2	56.8	73.5	209.8	211.1	(0.6)
Diamond Shamrock Corp.	64.7	31.9	42.3	46.2	185.1	121.3	52.6
Murphy Oil Corp.	33.4	41.7	43.9	40.1	159.1	163.0	(2.4)
American Petrofina	16.0	10.9	12.7	14.8	54.4	74.1	(26.6)

(a) Merged into Occidental Petroleum in December, 1982; (b) Merged into U.S. Steel Corp. in 1981; (c) Fiscal year ends Sept. 30.

The quarterly earnings reports in the 1982 and 1981 tables (above and below) can only be considered approximate at this time. This is because a number of companies restated their 1982—and in a few cases, their 1981—quarterly reports in their 1982 annual reports. The year-end earnings totals in the table above (for 1982 and 1981) reflect these restatements, however, and can be presumed accurate.

How They Fared in 1981 vs. 1980

(Add 000,000)

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Full Year 1981	Full Year 1980	% Change
Exxon Corp.	$1,600.0	$1,825.0	$1,075.0	$1,065.0	$5,565.0	$5,650.0	(1.5%)
Mobil Oil Corp.	640.0	700.0	506.0	588.0	2,434.0	2,813.0	(13.5)
Texaco Inc.	658.0	555.7	589.7	507.0	2,310.4	2,240.0	3.0
Standard Oil Co. of California	666.0	616.0	527.0	571.0	2,380.0	2,400.0	(1.0)
Standard Oil (Indiana)	376.7	552.8	608.3	384.0	1,921.8	1,915.3	—
Gulf Oil Corp.	303.0	311.0	316.0	301.0	1,231.0	1,140.0	7.9
Shell Oil Corp.	361.0	410.0	471.0	458.0	1,700.0	1,500.0	13.3
Atlantic Richfield Co.	346.4	380.1	433.5	469.8	1,671.3	1,651.4	1.2
Standard Oil Co. (Ohio)	520.4	478.7	470.0	477.8	1,946.9	1,811.0	7.4
Sun Co.	120.0	298.0	210.0	488.0	1,076.0	723.0	48.8
Phillips Petroleum Co.	270.8	229.8	192.3	186.5	897.4	1,069.6	(17.9)
Getty Corp.	230.2	205.0	205.2	216.5	856.9	871.7	(1.7)
Union Oil Co. of California	154.4	207.9	193.0	236.0	791.4	647.0	22.3
Amerada Hess Corp.	174.5	(53.7)	43.6	48.2	212.6	540.2	(60.6)
Cities Service Co.	57.7	90.5	77.6	(275.0)	(49.2)	477.5	—
Marathon Oil Co.	69.8	86.6	146.6	40.1	341.3	379.0	(9.5)
Ashland, Inc.*	20.2	7.2	13.3	49.3	90.0	205.1	(56.1)
Kerr-McGee Corp.	43.4	51.4	50.3	66.0	211.1	182.2	15.9
Diamond-Shamrock	51.1	(43.9)	54.4	59.7	121.3	201.2	(39.7)
Murphy Oil Corp.	38.4	45.0	41.1	41.4	165.9	150.5	10.2
American Petrofina	20.0	15.3	21.7	17.0	74.1	104.3	(29.0)

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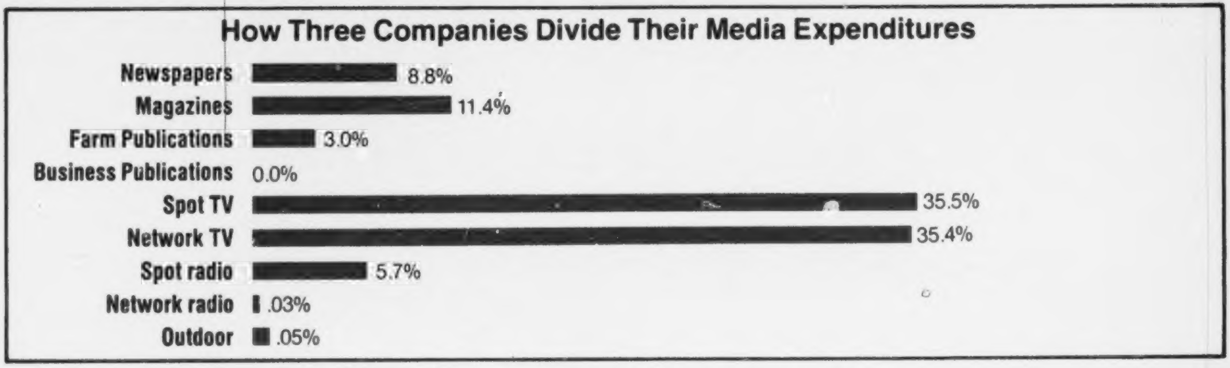
*Fiscal year ends 9/30

How Oil Spends Its Ad Money


How Three Companies Divide Their Media Expenditures

Source: Advertising Age and NPN estimates. Note table below for further detail and footnotes for special caveats.

How Oil Companies Split Their Budgets (a)

(Add 000)

	Mobil (b)		Exxon		Shell	
	1981	1980	1981	1978	1978	1977
Newspapers	$ 8,516	$ 5,923	$1,529	$1,958	$ 751	$ 644
Gen. Magazines	2,416	2,747	6,755	5,179	4,706	4,772
Farm Publications	1,449	1,915	255	188	2,006	2,225
Business Publications	—	—	—	—	(c)	(c)
Spot TV	33,640	33,118	6,245	6,804	3,491	2,657
Network TV	11,354	8,666.	24,215	12,668	7,659	10,906
Spot Radio	2,537	2,873	2,931	4,022	947	338
Network Radio	—	—	298	—	36	635
Outdoor	121	135	255	442	2	44
Total	**$60,395(c)**	**$55,377**	**$42,483**	**$31,261**	**$19,592**	**$22,224**

(a) Shell did not make the list of the nation's top 100 advertisers in 1979, 1980 or 1981; Exxon did not make it in 1979 or 1980. Hence, the only comparable data available are the 1977-1978 figures for Shell and the 1978 and 1981 figures for Exxon versus Mobil's 1980-1981 data; (b) Mobil data includes Montgomery Ward and Container Corp. of America, which accounted for about 82% of the total advertising budget in 1980; (c) Column total is more than individual expenditures due to 0.6% unmeasured expenditures.

Source: Advertising Age, top 100 advertisers in 1981; Shell's budget for 1978 was estimated on an Ad Age basis; no recent data available.

Network TV Spending

Company	1981 Spending (Add 000)	1982 Spending (Add 000)	% Change
Phillips	$8,780	$9,731	+11%
Shell	6,145	9,511	+55
Texaco	12,016	7,558	−37
Sun	5,367	6,461	+20
Quaker State	3,068	5,056	+65
Pennzoil	5,833	4,860	−17
Exxon	20,577	4,213	−80

Company	1982 Spending (Add 000)	1981 Spending (Add 000)	% Change
Conoco	7,075	3,404	−52
Ashland	3,190	1,700	−47
Ford (motorcraft)	1,305	720	−45
Witco (Kendall)	820	609	−26
Gulf	205	414	+102
Getty	—	320	Inf.

Source: Television Bureau of Advertising from BAR, April 1983.

Spot TV Spending

Company	1981 Spending (Add 000)	1982 Spending (Add 000)	% Change
Standard Oil (Ind.)	$11,631	$12,562	+8%
Exxon	6,223	10,804	74
Standard Oil (Calif.)	8,518	7,756	−9
Union Oil of Calif.	4,291	6,816	+59
Gulf	9,624	6,756	−30
Shell	7,416	6,243	−16
Mobil	8,993	6,006	−33
Getty	3,202	4,621	+44
Atlantic Richfield	746	4,414	+492
Sun	1,799	3,500	+95

Company	1982 Spending (Add 000)	1981 Spending (Add 000)	% Change
Texaco	3,243	3,746	−13
Burmah Oil	3,048	2,856	+7
Ashland	2,796	2,069	+35
Pennzoil	2,623	2,522	+4
Quaker State	2,466	2,054	+20
Standard Oil (Ohio)	2,092	2,621	−20
Phillips	986	2,092	−53
Witco (Kendall)	697	681	+2
Amerada Hess	613	—	Inf.

Source: Television Bureau of Advertising from BAR, April 1983.

Current Automotive Registrations (a)

	Automobiles			Trucks and Buses		All Motor Vehicles			Motorcycles
State	Registered 1981	Estimated 1982	% Chng.	Estimated 1982	% Chng.	Registered 1981	Estimated 1982	% Chng.	Estimated 1982
Alabama	2,149,718	2,248,000	4.6%	886,000	2.8%	3,011,290	3,134,000	4.1%	80,000
Alaska	178,887	188,000	5.1	116,000	6.7	287,595	304,000	5.7	10,000
Arizona	1,507,320	1,603,000	6.3	635,000	6.8	2,101,823	2,238,000	6.5	106,000
Arkansas	1,092,943	1,122,000	2.7	591,000	4.1	1,660,794	1,713,000	3.1	31,000
California	13,208,593	13,362,000	1.2	3,481,000	−2.8	16,790,562	16,843,000	0.3	750,000
Colorado	1,836,984	1,863,000	1.4	668,000	4.0	2,479,317	2,531,000	2.1	127,000
Connecticut	1,952,134	1,945,000	−0.4	153,000	−0.9	2,106,516	2,098,000	−0.4	74,000
Delaware	327,035	330,000	0.9	80,000	2.9	404,756	410,000	1.3	12,000
Dist. of Col.	253,403	264,000	4.2	20,000	4.9	272,465	284,000	4.2	7,000
Florida	6,484,571	6,586,000	1.6	1,533,000	2.9	7,974,098	8,119,000	1.8	221,000
Georgia	2,951,022	2,968,000	0.6	914,000	1.4	3,852,467	3,882,000	0.8	117,000
Hawaii	524,035	534,000	1.9	58,000	2.2	580,777	592,000	1.9	8,000
Idaho	526,199	533,000	1.3	336,000	1.7	856,663	869,000	1.4	62,000
Illinois	6,334,050	6,424,000	1.4	1,278,000	1.2	7,597,068	7,702,000	1.4	310,000
Indiana	2,880,098	2,885,000	0.2	1,094,000	8.2	3,891,297	3,979,000	2.3	185,000
Iowa	1,702,819	1,713,000	0.6	655,000	0.2	2,356,763	2,368,000	0.5	247,000
Kansas	1,386,872	1,386,000	−0.1	650,000	2.1	2,023,408	2,036,000	0.6	126,000
Kentucky	1,800,574	1,805,000	0.2	795,000	0.3	2,593,447	2,600,000	0.3	66,000
Louisiana	1,979,204	1,991,000	0.6	868,000	3.0	2,822,176	2,859,000	1.3	82,000
Maine	530,864	522,000	−1.7	195,000	−1.7	729,251	717,000	−1.7	55,000
Maryland	2,387,198	2,413,000	1.1	483,000	4.0	2,851,581	2,896,000	1.6	83,000
Massachusetts	3,293,324	3,298,000	0.1	470,000	1.1	3,758,139	3,768,000	0.3	126,000
Michigan	5,004,645	4,945,000	−1.2	1,143,000	−1.5	6,165,600	6,088,000	−1.3	245,000
Minnesota	2,327,769	2,338,000	0.4	847,000	2.8	3,151,936	3,185,000	1.0	193,000
Mississippi	1,198,295	1,200,000	0.1	384,000	1.7	1,576,004	1,584,000	0.5	30,000
Missouri	2,466,032	2,488,000	0.9	888,000	2.4	3,333,560	3,376,000	1.3	107,000
Montana	425,767	431,000	1.2	326,000	5.0	736,152	757,000	2.8	40,000
Nebraska	803,579	789,000	−1.8	405,000	−0.6	1,210,957	1,194,000	−1.4	51,000
Nevada	505,804	528,000	4.4	200,000	4.5	697,178	728,000	4.4	22,000
New Hampshire	651,077	661,000	1.5	112,000	1.8	761,088	773,000	1.6	60,000
New Jersey	4,176,738	4,176,000	−0.1	543,000	5.1	4,696,536	4,719,000	0.5	113,000
New Mexico	684,067	687,000	0.3	361,000	−0.6	1,047,936	1,048,000	0.0	53,000
New York	7,097,565	7,153,000	0.8	1,034,000	1.2	8,119,763	8,187,000	0.8	194,000
North Carolina	3,420,297	3,447,000	0.8	1,132,000	0.6	4,545,624	4,579,000	0.7	116,000
North Dakota	374,994	381,000	1.6	271,000	1.7	641,370	652,000	1.7	32,000
Ohio	6,393,685	6,389,000	−0.1	1,332,000	−0.9	7,737,264	7,721,000	−0.2	274,000
Oklahoma	1,684,399	1,790,000	6.3	1,017,000	9.4	2,614,381	2,807,000	7.4	140,000
Oregon	1,542,792	1,551,000	0.5	541,000	−0.1	2,084,546	2,092,000	0.4	88,000
Pennsylvania	5,920,737	6,017,000	1.6	1,100,000	1.0	7,009,902	7,117,000	1.5	235,000
Rhode Island	519,002	527,000	1.5	77,000	0.0	596,026	604,000	1.3	25,000
South Carolina	1,499,066	1,504,000	0.3	479,000	1.6	1,970,351	1,983,000	0.6	44,000
South Dakota	379,662	379,000	−0.2	235,000	1.0	612,406	614,000	0.3	39,000
Tennessee	2,870,407	2,911,000	1.4	659,000	−0.6	3,533,299	3,570,000	1.0	84,000
Texas	7,860,366	8,002,000	1.8	3,431,000	5.2	11,123,150	11,433,000	2.8	353,000
Utah	698,796	714,000	2.2	333,000	−0.2	1,032,500	1,047,000	1.4	70,000
Vermont	266,789	275,000	3.1	81,000	3.3	345,214	356,000	3.1	22,000
Virginia	3,231,904	3,297,000	2.0	627,000	2.4	3,844,334	3,924,000	2.1	86,000
Washington	2,374,996	2,405,000	1.3	937,000	−1.9	3,330,285	3,342,000	0.4	147,000
West Virginia	955,457	985,000	3.1	405,000	2.2	1,351,913	1,390,000	2.8	39,000
Wisconsin	2,542,274	2,563,000	0.8	564,000	1.6	3,097,621	3,127,000	0.9	211,000
Wyoming	293,099	305,000	4.1	199,000	2.4	487,342	504,000	3.4	23,000
Total	**123,461,507**	**124,821,000**	**1.1%**	**35,622,000**	**1.8%**	**158,456,511**	**160,443,000**	**1.3%**	**6,021,000**

(a) These estimates were made by the Federal Highway Administration on the basis of state reports of vehicle registrations in the early months of 1982 and information available on current trends, vehicle production, and other factors. They include both privately owned and publicly owned vehicles except those owned by the military services. Registrations shown for 1981 are from table MV-1, 1981.

Estimated Licensed Drivers, By Sex and States—1981 and 1982

Women drivers outnumber male drivers in two states and are close to topping them in five others, according to the Federal Highway Administration's annual statistical book.

Women hold more licenses than men in Indiana and Utah, and preliminary estimates for 1982 indicate they are very close to the 50-50 level with males in Connecticut, Kansas, Massachusetts, Oklahoma and Virginia. Women drivers are a majority on a national basis. In 1980, they held 53.13% of licenses; in 1981, 52.96%; and in 1982, it is estimated they held 52.79%.

	1981 (Actual)				1982 (Estimated—Add 000)			
State	Male Drivers	Female Drivers	Total Drivers	% Male Drivers	Male Drivers	Female Drivers	Total Drivers	% Male Drivers
Alabama	1,203,735	1,112,064	2,315,799	51.98%	1,213	1,147	2,360	51.40%
Alaska	129,903	98,574	288,477	56.86	133	102	235	56.60
Arizona	1,093,190	926,952	2,020,142	54.11	1,229	962	2,091	58.78
Arkansas	793,301	739,015	1,532,316	51.77	816	765	1,581	51.61
California	8,517,899	7,528,353	16,046,252	53.08	8,675	7,692	16,367	53.00
Colorado	1,086,992	1,017,363	2,104,355	51.65	1,105	1,044	2,149	51.42
Connecticut	1,138,581	1,058,924	2,197,505	51.81	1,134	1,090	2,224	50.99
Delaware	221,596	207,440	429,036	51.65	226	212	438	51.60
Dist. of Col.	187,000	156,000	343,000	54.52	186	156	342	54.39
Florida	3,978,809	3,662,226	7,641,035	52.07	4,104	3,804	7,908	51.90
Georgia	1,825,622	1,692,115	3,517,737	51.90	1,862	1,733	3,595	51.79
Hawaii	294,919	239,932	534,851	55.14	297	243	540	55.00
Idaho	337,650	305,052	647,702	52.54	341	310	651	52.38
Illinois	3.646,620	3,216,389	6,863,009	53.13	3,667	3,251	6,918	53.00
Indiana	1,742,650	1,752,656	3,495,306	49.86	1,758	1,779	3,537	49.70
Iowa	1,116,000	1,006,000	2,122,000	52.59	1,125	1,014	2,139	52.59
Kansas	858,200	829,999	1,680,099	51.08	861	827	1,698	50.71
Kentucky	1,147,040	1,000,215	2,147,255	53.42	1,163	1,027	2,190	53.11
Louisiana	1,285,613	1,120,085	2,405,698	53.44	1,287	1,164	2,451	52.51
Maine	388,735	363,818	752,553	51.66	398	377	775	51.35
Maryland	1,419,546	1,303,870	2,723,416	52.12	1,431	1,320	2,751	52.02
Massachusetts	1,862,159	1,731,180	3,593,339	51.82	1,786	1,771	3,557	50.21
Michigan	3,367,092	3,082,908	6,450,000	52.80	3,384	3,111	6,495	52.10
Minnesota	1,233,596	1,149,301	2,382,897	51.77	1,250	1,173	2,423	51.59
Mississippi	889,164	810,033	1,699,197	52.33	894	822	1,716	52.10
Missouri	1,699,659	1,581,020	3,280,679	51.81	1,710	1,603	3,313	51.61
Montana	271,393	212,743	483,866	56.09	272	214	486	55.97
Nebraska	565,072	522,925	1,087,997	51.94	568	528	1,096	51.82
Nevada	347,008	295,147	642,155	54.04	356	304	660	53.94
New Hampshire	347,124	317,961	665,085	52.19	351	324	675	52.00
New Jersey	2,722,760	2,432,161	5,154,921	52.82	2,809	2,501	5,310	52.90
New Mexico	475,450	438,880	914,330	52.00	482	446	928	51.94
New York	5,077,131	4,171,537	9,248,668	54.90	5,145	4,124	9,287	55.40
North Carolina	1,985,339	1,845,345	3,830,684	51.83	2,010	1,878	3,888	51.70
North Dakota	223,498	201,454	424,952	52.59	225	205	430	52.33
Ohio	3,892,172	2,507,440	6,336,612	60.43	3,559	2,334	5,893	60.39
Oklahoma	987,563	965,412	1,952,975	50.57	998	978	1,976	50.51
Oregon	1,052,388	931,209	1,983,597	53.05	1,063	946	2,009	52.91
Pennsylvania	3,897,417	3,354,112	7,251,529	53.75	3,952	3,408	7,360	53.70
Rhode Island	307,140	286,001	593,141	51.78	309	290	599	51.59
South Carolina	1,014,327	934.193	1,948,520	52.06	1,023	949	1,972	51.88
South Dakota	248,275	227,997	476,272	52.13	250	231	481	51.98
Tennessee	1,474,996	1,363,018	2,838,014	51.97	1,485	1,381	2,866	51.81
Texas	5,097,941	4,575,944	593,141	52.70	5,292	4,769	10,061	52.60
Utah	442,327	446,657	888,984	49.76	459	466	925	49.62
Vermont	180,834	167,931	348,765	51.85	182	170	352	51.70
Virginia	1,474,996	1,753,855	3,570,363	50.88	1,848	1,797	3,645	50.70
Washington	5,097,941	1,291,828	2,732,785	52.73	1,468	1,322	2,790	52.62
West Virginia	841,255	647,045	1,488,300	56.52	846	654	1,500	56.40
Wisconsin	1,577,732	1,449,615	3,027,347	52.12	1,590	1,468	3,058	51.99
Wyoming	198,304	164,463	362,767	54.66	206	172	378	54.50
Total U.S.	**77,888,182**	**69,187,987**	**147,075,169**	**52.96%**	**78,683**	**70,376**	**149,059**	**52.79%**

Source: Federal Highway Administration, Table DL-IA, Highway Statistics, 1981, for 1981 data; Table SS81-5, Selected Highway Statistics and Charts, 1981, for 1982 estimates.

Passenger Cars: Oil, Automotive Trends

Fuel and Oil Consumption

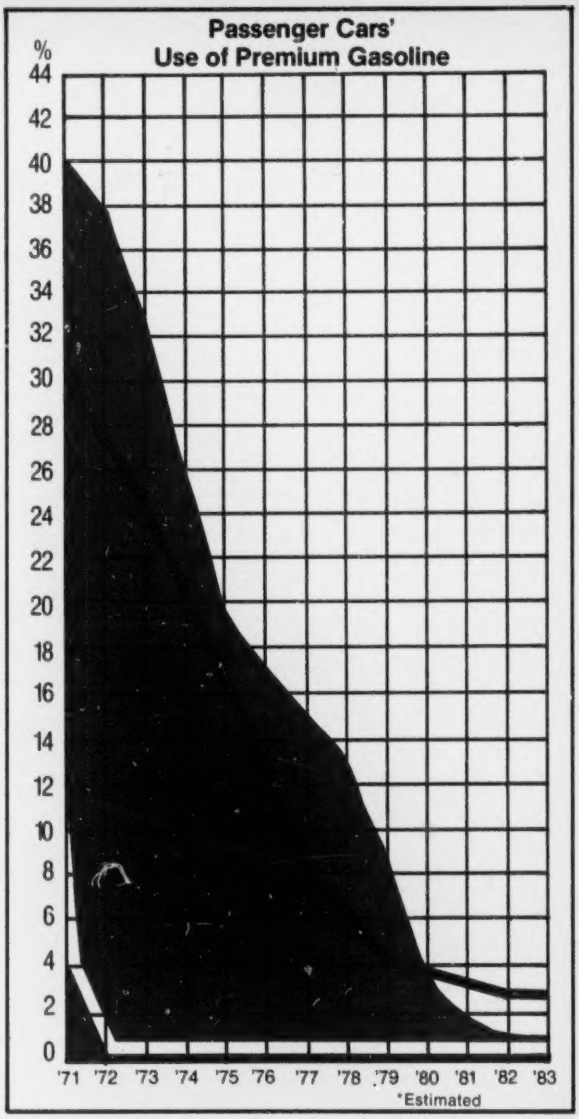
Year	Avg. annual miles per car (a)	Avg. gal. gasoline (a)	Avg. miles per gal. (a)	M/O ratio (b)	Avg. qts. motor oil
1982	**8,950**	**580**	**15.4**	**—**	**—**
1981	9,026	581	15.5	.28	6.8
1980	9,135	603	15.2	.25	6.5
1979	9,245	664	14.3	.25	7.3
1978	10,046	715	14.1	.28	7.6
1977	9,839	706	13.9	.28	7.9
1976	9,763	711	13.7	.28	8.0
1975	9,364	712	13.5	.31	9.5
1974	9,448	704	13.4	.31	9.5
1973	9,992	763	13.1	.31	9.5
1972	10,184	755	13.5	.33	10.0
1971	10,121	746	13.6	.36	10.7
1970	9,978	735	13.6	.41	12.0
1969	9,782	718	13.6	.42	12.1
1965	9,387	667	14.1	.63	16.8

(a) 1965-1980 U.S. Department of Transportation; 1982 NPN estimate.
(b) Motor-oil ratio; the number of gal. of oil sold per 100 gal. of gasoline.

U.S. Passenger-Car Compression Ratios

Year	Weighted average (a)	Highest (b)	Lowest (b)
1983	**8.5**	**9.5**	**7.5**
1982	8.5	9.5	7.5
1981	8.3	9.0	7.5
1980	8.3	9.0	7.5
1979	8.3	9.0	7.5
1978	8.2	9.0	7.5
1977	8.2	9.0	7.5
1976	8.2	9.0	7.6
1975	8.2	9.0	7.6
1974	8.2	9.0	7.6
1973	8.3	9.0	7.6
1972	8.4	9.0	8.0
1971	8.7	10.7	8.0
1970	9.4	11.0	8.3
1969	9.5	11.0	8.3
1965	9.4	10.8	8.0

(a) Weighted average is based on production of automobiles of that model year. Production statistics have been used for all years except 1983 which are estimated.
(b) Highest and lowest compression ratios of standard (not optional) engines; excludes diesels.
Source: 1965-1974, Automotive-industry sources. 1975-83 NPN estimates.



■ Premium Recommended for cars on Road.
■ Premium Gasoline Sales, U.S.
□ Premium Recommended for Model Year.

Vehicle Ownership by Households And Licensed Drivers

Licensed Drivers	Motor Vehicle Ownership One	Two	Three	Four+	Sub-Total	None	Distribution by Households (a)
One	65.6%	16.7%	12.4%	10.3%	35.8%	21.1%	33.6%
Two	29.8	73.1	47.5	36.1	50.0	3.1	42.6
Three	1.8	8.5	31.0	28.2	9.7	0.2	8.2
Four+	0.2	1.1	7.9	19.4	2.7	0.1	2.3
Five+	—	0.1	1.0	5.9	0.5	—	0.5
All Drivers	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Distribution (a) by Households	34.7%	34.3%	10.6%	5.0%	84.6%	15.4%	100.0%

(a) Based on 75.4-million households. Data compiled by Federal Highway Administration in the National Personal Transportation Study.
Source: FHA Highway Statistics 1979, Table NPTS-8, September, 1980.

Passenger-Car Use of Premium

Year	Premium Recommended Model Year	Premium Recommended Cars on Road (a)	Premium Sales
1983	**0**	**3.0%**	**0.7%**
1982	0	3.0	0.9
1981	0	3.0	1.4
1980	0	3.7	4.7
1979	0	4.5	8.3
1978	0	6.5	12.6
1977	0	8.9	14.8
1976	0	11.9	17.1
1975	0	15.9	19.0
1974	0	19.7	24.5
1972	0	27.1	38.1
1970	32	32.3	42.6

(a) Weighted average based on all car registrations.
Source: Premium sales 1964-1975, Ethyl Corp.; 1976-1983 NPN estimates.

1981 Relationships by Population and Drivers

State	Resident Population (Add 000)	Licensed Drivers per 1,000 Resident Population	Registered Motor Vehicles per 1,000 Resident Population	Gal. of Fuel per Vehicle	Miles per Gal.	Annual Miles per Vehicle	Vehicle Miles per Licensed Driver
Alabama	3,917	591	769	695	13.31	9,249	12,027
Alaska	412	555	698	650	15.57	10,122	12,741
Arizona	2,794	723	752	720	12.28	8,835	9,192
Arkansas	2,296	667	723	809	12.48	10,098	10,944
California	24,195	663	694	703	13.55	9,523	9,965
Colorado	2,965	710	836	645	13.97	9,009	10,615
Connecticut	3,134	701	672	652	14.10	9,193	8,813
Delaware	598	717	677	804	13.70	11,014	10,391
Dist. of Col.	631	544	432	671	18.10	12,141	9,644
Florida	10,183	750	783	657	14.53	9,549	9,965
Georgia	5,574	631	691	851	13.68	11,640	12,748
Hawaii	981	545	592	542	18.60	10,081	10,947
Idaho	959	670	893	578	14.10	8,144	10,856
Illinois	11,462	599	663	657	13.19	8,666	9,593
Indiana	5,468	639	712	803	12.45	9,992	11,124
Iowa	2,899	732	813	683	11.88	8,110	9,007
Kansas	2,383	705	849	700	12.34	8,634	10,398
Kentucky	3,662	586	708	757	12.83	9,715	11,734
Louisiana	4,308	558	655	838	10.39	8,712	10,220
Maine	1,133	664	644	745	13.97	10,404	10,082
Maryland	4,263	639	669	727	13.81	10,035	10,508
Massachusetts	5,773	622	651	634	15.08	9,565	10,004
Michigan	9,204	701	670	681	14.78	10,070	9,626
Minnesota	4,094	582	770	664	13.70	9,099	12,035
Mississippi	2,531	671	623	885	12.15	10,756	9,976
Missouri	4,941	664	675	834	12.65	10,553	10,723
Montana	793	610	928	724	13.15	9,512	14,471
Nebraska	1,577	690	768	728	13.05	9,500	10,574
Nevada	845	760	825	798	11.71	9,345	10,146
New Hampshire	935	711	814	549	15.72	8,632	9,878
New Jersey	7,404	696	634	727	15.03	10,929	9,957
New Mexico	1,328	689	789	826	13.26	10,945	12,545
New York	17,602	525	461	692	14.09	9,745	8,556
North Carolina	5,953	643	764	696	13.29	9,253	10,980
North Dakota	658	646	975	683	12.21	8,345	12,594
Ohio	10,781	588	718	688	13.49	9,280	11,331
Oklahoma	3,100	630	843	796	13.83	11,008	14,736
Oregon	2,650	749	787	699	13.39	9,362	9,839
Pennsylvania	11,871	611	591	720	14.16	10,201	9,861
Rhode Island	953	622	625	638	14.67	9,354	9,399
South Carolina	3,167	615	622	878	13.33	11,700	11,832
South Dakota	686	694	893	674	14.61	9,845	12,659
Tennessee	4,612	615	766	764	12.86	9,829	12,237
Texas	14,766	655	753	827	13.06	10,796	12,413
Utah	1,518	586	680	742	14.01	10,394	12,072
Vermont	516	676	669	761	14.60	11,109	10,996
Virginia	5,430	658	708	743	13.45	9,997	10,764
Washington	4,217	648	790	607	14.98	9,089	11,076
West Virginia	1,952	762	693	673	11.77	7,927	7,200
Wisconsin	4,741	639	653	737	14.72	10,851	11,102
Wyoming	492	737	991	930	11.52	10,715	14,395
Total	**229,307**	**641**	**691**	**722**	**13.54**	**9,783**	**10,541**

Brand Names of Gasoline and Motor Oil

Gasoline	Motor Oil
Ada Resources	
Phillips 66 (r, xr)	M&M Phillips 66 Unique HDS HDS + 1 Super HDS II Trop Artic
Agway Petroleum Corp. (A)	
Agway (r, xr)	Agway
American Petrofina	
Fina Gasoline (r) Fina Unleaded (xr, xp)	Fina Shield Fina HD Premium Fina Ultra Supreme 10W-40 Fina 2001 (5W30)
Amos Post, Inc.	
Mobil (r) Chevron (r)	Mobil Chevron
Amoco Oil Co.	
Amoco Regular (r) Amoco Premium (p) Amoco (xr) Amoco Premium Lead Free (xp)	**Reseller** Amoco Amolube Amoco M.V. Amoco L.D.O. **Consumer/ Commercial** Amoco 100 Amoco 200 Amoco 300 Amoco M.V.
Apollo Oil Co. (A)	
Apollo (r, p, sp, diesel)	
Arkla Chemical Corp.	
Arkla Regular (r) Arkla No-Lead (r) Arkla Super No-Lead (xsp) (xr)	Arkla Blue Chip Arkla Royal Blue Arkla Multi-Range Super Express
Armour Oil Co.	
Asamera Oil (U.S.)	
Asamera (r) (x) (xp)	
Ashland Petroleum Co.	
Ashland (r, p, sp) (xr, xp, xsp)	
Atlantic Richfield Co.	
Arco (r) Arco Clear (xr) Arco Unleaded Supreme (xp)	Arco Arco Plus Arco Fleet HD Arco Fleet S3 Plus Arco XHD Arco Supreme Arco GT Arco Graphite
Atlas Oil Co. of Utica (A)	
Cities Service (r&xr) Ashland Oil (p&xp) Triangle (sp&xsp)	
Augsbury Corp.	
Chevron (r) Mobil (p) Getty (sp)	Augsbury Chevron Gulf
Automatic Comfort Corp.	
Citgo Mobil Sun Texaco	Citgo: Regular, Premium Sun: Sunlube, Dynalube, Special Mobil: Regular, Premium Texaco: Havoline
Generic Terms Used for All Gasolines.	
Bagwell Oil Co.	
Union 76	Union 76 Wolf's Head
E. M. Bailey Dist. Co.	
Chevron (r)	Chevron
Beacon Oil Co.	
Beacon (r, p, diesel) (xr, xp) Beacon (xr) †	Sequoia Beacon
Best Oil	
Best (r) No-Lead (p) Firepower (xsp)	Arco Havoline
Bonded Oil Co. (A)	
Bonded (rx) (px)	Bonded Heavy Duty Bonded All Weather
Bray Terminals (A)	
Citgo (r) (p) (sp) (xr, xp, xsp)	Citgo ARCO
Brennan Petroleum	
Brenco (r, x, sp)	
Browning Oil Co.	
Shell (r, xr) (xp) Rally (r, xr)	Shell
Burmah-Castrol (A)	
	Castrol Regular Castrol Heavy Duty Castrol CRF Castrol "R" Racing Oil Castrol Grand Prix Motorcycle Castrol GP Racing Castrol 10W-30, 20W-40 Castrol GTX, 10W-50, 10W-40, 20W-50
Campbell Oil Co.	
Shell Sunoco (r, xr) Sunlite (xp)	Sunoco Citco
Cel Oil Products Corp.	
Cel (r) (p) (sp) Gas Up (r, p, sp) (†)	
CENEX	
Cenex (r) (xr) (xp) (xsp) Cenex Gasohol	Cenex Econex Cenex Cenex Multigrade Cenex Superlube 518
Certified Oil Co.	
Certified (r, xr) Super NL (xp)	Certified Certified 10W-40
Champlin Petroleum Co. (A)	
Champlin (r&xr) Harbor (r&xr) (†)	Champlin Geo-XL Champlin CMO Champlin HIVI Champlin S-3 Plus Champlin Deluxe Champlin TranSeason
Charter Management, Inc.	
Sav-A-Ton (r, xr) (rp, xp) (rsp, xsp) Ten-4, Happy Stores (r, xr) (rp, xp) (rsp, xsp) †	
Charter Marketing Co.	
Charter (r, xp) (xr, xsp) Billups (r, sp) (xr, xsp) †	
Cheker Oil Co.	
Cheker (r, xr) (rsp) (xsp)	Cheker Non-Detergent Cheker H.D. Plus Cheker All Season 10W-40 Cheker ATF
Chevron U.S.A.	
Chevron (r) (xr) Chevron Supreme (xp) Calco (r, xr, xp) (†)	Chevron Delo 100 Chevron Delo 200 Chevron RPM Delo Chevron Special Chevron Delo 300 Chevron Delo 400 Chevron Custom Chevron Delo 300 15W-40
Citadel Corp. (A)	
Citadel (r, p, sp) (xr, xp, xsp) (diesel)	
Cities Service Co.	
Citgo (r) (xr) (xp)	Citgo Non-Detergent Citgo C-300 HD Detergent Citgo C-500 Citgo All Season 10W-30 Citgo All Season 10W-40
Coen Oil Co.	
Amoco	Duplex All Penn Grade Quaker State Ashland Pennzoil Kendall Valvoline Amoco
Colonial Oil Industries	
Eagle (r) Colonial No Lead (xr) (xp)	
Consumers Inc. (A)	
Consumers (r&p) Consumers Gasohol	Liquid Gold Liquid Gold X HD
Conoco	
Conoco Regular (r) (xr) Conoco Super Unleaded	Par Tracon Tracon Supreme Fleet Fleet Supreme Super New Generation All Season
Consumers Gasoline Stations, Inc.	
Consumers (r) (xr) Scot (r) (xr) †	
Consumers Oil Corp. (A)	
Citgo (r, xr) Chevron (r, xr) (†)	Citgo Chevron
Cook & Cooley	
Texaco (r, xp, xsp)	Texaco
Cray Energy (A)	
Citco (r, xp, xsp)	Citco Shell Texaco Pennzoil
Curtis Oil Co. (A)	
American (r) Lead Free Amoco (xr) Amoco Premium (xp)	Amolube Amoco 200 Amoco 300 Amoco M-V Super Premalube 100
K. E. David, Ltd.	
Citgo (r) (x)	Arco
Dead River Co. (A)	
Exxon (r, p, xr) House Brand (r, xr) †	Motor Guard-Int. Lube UniGuard Exxon Extra Exxon Uniflow
DeBlois Oil Co. (A)	
Texaco (r, p, sp) Texaco Super (xr, xp, xsp)	Texaco M.O. Havoline
Delta Marketing Co.	
Red Ace (r, p&sp) (xr) (xp) (xsp) Western (r, p&sp) (xr) (xp) (xsp) Delta (r, p&sp) (xr) (xp) (xsp) Freeway (r, p, sp) (xr, xp, xsp) Red Bird (r, p, sp) (xr, xp, xsp)	D.M.C. Non-Detergent D.M.C. Heavy Duty D.M.C. 10W-40
Derby Refining Co.	
Derby (r) Star Kleen (x) Premium Unleaded w/Ethanol	Triumph Super Flex Ultra-Life Premium E2
Diamond Shamrock Corp.	
Trail Master (r) Cloud Master II (xr) Fill-Em-Fast (r) (xr) (xp) †	Genuine Liberty LPG-NG Triple Action Triple Action S-3 Equa Flow
Dominion Oil Co.	
BP (r, p&sp) (xr, xp, xsp) Union (r, p, sp) (xr, xp, xsp)	Union BP
East Coast Oil Corp.	**East Coast** Thrift Quaker State Pennzoil

Key

Gasoline	**(r)**	**Regular**
	(x)	**Unleaded**
	(p)	**Premium**
	(sp)	**Superpremium**
	(†)	**Secondary brand**

(A) Most recent information available. No reply received from current questionnaire.
Source: NPN questionnaires.

	Gasoline	Motor Oil
Eddy Refining Co. (A)	Eddy Regular (r) Eddy No-Lead (xp) Eddy Premium No-Lead (xsp)	
Elm City Filling Stations (A)	Elmco (r) (xr) Elmco (°p) Elmco (sp, xsp) Nutmeg (r, xr) †	MacMillan Motor Oils
Englefield Oil Co.		Marathon Phillips Mobil
Exxon Co., U.S.A.	Exxon (r) Exxon Unleaded (xr) Exxon Extra (rp) (xp) Alert (r&p) (xr) †	Oilex Exxon Plus Exxon Extra Uniflo
Farmland Industries (A)	Co-op (r)	Co-op Double Circle Co-op Dual Season Co-op Diesel Engine
FCX, Inc.	Unico (r) (xr&p)	Unico
Fireline Petroleum		
Fisca Oil Co.	Fisca (r) Fisca (xr, xp)	Fisca HD Fisca 10W-40
Flying J Oil Co. (A)	Flying J (r&p) (xr) Fastway (r&p) (xr) (†)	
Don Foster Oil Co.	(r, xr) Super Unleaded (xp) (r, xr) † Gasohol (xp) †	Mobil Sunoco Pennzoil
FS Services (A)	FS Super Power (r) (xr)	FS Blue Circle FS Super Lube FS Low Ash FS Multi-Range FS Super Lube 15W-40
Gasco Gasoline	Gasco (r, p, sp) (xr, xp, xsp) Jiffy (r, p, sp) (xr, xp, xsp) †	Gasco Economy Gasco Premium HD Gasco All Season
Gem Petroleum—Shop & Go	Citgo (r, p, sp, Diesel) (xr, xp, xsp, x Diesel) Amoco (r) † Texaco (p) † Union (sp) † Phillips (Diesel) †	Shop & Go Premium Quaker State Pennzoil Citgo
Getty Refining & Marketing Co.		Getty Skelly
Giant Industries	Giant (r, p, Diesel, xr, xp, x Diesel)	
Golden Gate Petroleum Co.		Bapco Holdner Texaco Union Shell
Golden Imperial	Imperial Regular (r) Imperial Leadfree (xr) Imperial Premium Leadfree (xp)	Lonestar
Golub Corp.	Chevron (r, xr)	
Great River Oil Co. (A)	Great River (r) GR Premium (xsp) Oklahoma (r) (†) Oklahoma Super Unleaded (xr) (†)	Great River Quaker State Pennzoil Amoco Super Permalube Amoco LDO
Gresham Petroleum Co. (A)	Amoco (r, xr) Amoco (xsp)	Amoco
Growmark, Inc. (A)	FS Super (r, xr)	FS Blue Circle FS Multi-Range FS Super Lube
Gulf Oil	Good Gulf (r) Gulf Crest (xr) Gulf Super (xsp)	Gulflube Gulf Pride Single G Gulf Pride SP
Gull Industries	(r, xr, xsp)	
Herbst Oil Co.	Super Unleaded	
Highway Oil (A)		Workingman's Friend
Hi-Quality Lo-Cost Service Stations	Hi-Quality Low-Cost (r, xr, xp)	
Barney Holland Oil Co.	Texaco (r, xr, xp)	Texaco Exxon Quaker State Conoco Havoline Pennzoil
Hop-In Food Stores	Hop-In (r, p, sp, xr, xp, xsp)	Hop-In
Horkey Oil Co.	Shell (r, p, xr, xp) Red Dot (r, p, xr, xp)	Shell
Horn Distributing Co.	Gulf (r, p, sp, xr, xp, xsp)	Gulflube Gulf Pride
Hornet Oil Co. (A)	Hornet (r&p) (xr)	
Hudson Oil Co. (A)	Hudtane (sr) Hudson Super Regular (r) Hudson Premium (p) Hudson Unleaded (xr)	Hud Hudson Heavy Duty Hudson Premium 10W-40 Hudson ATF
Hughes Oil Co.	Mobil (r, xr) Phillips 66 (p, xp) Lil Champ (r, xr) † Jiffy (p, xp) †	Mobil Phillips 66
Hull Oil Co.	Hull (r) (xr) (xsp)	Phillips
Imperial Florida Oil Co. (A)	Imperial (r&p) (x)	Imperial HEP Imperial Premium Imperial AW
J. S. & J. Service	Jimmys (r, p) (xr, xsp)	
Kelley-Williamson Co. (A)	Mobil (r, sp)	Mobil
Kent Oil Co.	Shell (r)	
Kerr-McGee Refining Corp. (A)	K-M (r, xr, xp)	Kerr-McGee Valulube Blue Max "All Fleet" Kerr-McGee Heavy Duty Kerr-McGee Blue Velvet FEO
Key Energy Enterprises, Inc.	Union (r, p, sp, other) (xr, xp, xsp, x other) Key (r, p, sp, other) (xr, xp, xsp, x other) †	
Kickapoo Oil Co. (A)	Kickapoo (r) (xp)	
Kimber-Allen Petroleum Corp.		Amoco Citco Getty Quaker State
Kingston Oil Supply Corp.	Chevron (r, p, sp, xr, xp, xsp)	Chevron
Koch Marketing Co. (A)	Regular (r) Premium (p) Unleaded (mg x)	Longlife Lube High Performance 10W-40
Land O'Lakes, Inc.	Land O'Lakes (r, p, sp) (xr, xp, xsp)	Golden D Supreme 212
Lido Co. of New England	Lido (r, p, xr, xp)	Lido
Little Oil Co.	Phillips (r, p, sp)	
Macmillan Ring-Free Oil Co. (A)		Royal Scot Macmillan Ring-Free Macmillan Ring-Free Premium
Marathon Oil Co.	Mile-Maker (r) (xr) Super-M (xp)	VEP Heavy Duty All-Season 10W-30 Multipower—Straight Weight Superior All Season 10W-40 Endurance Oil High Performance All Season 20W-50 Multipower-3 15W-40 Ultra-D 5W-40
Martin Oil Marketing, Ltd.	Martin (r, p, Ethanol Enhanced) (xr, xp, xsp)	Martin Oil Martin HD Martin 10/30 Martin 10/40
Martin Oil Service (A)	Martin Regular (r) Martin Premium (p) Martin Unleaded (xr) Martin Gasohol	Martin Martin Heavy Duty Martin All Season 10W-30, 10W-40
McDowell Oil Service, Inc.	ARCO (r) ARCO Clear (xr) ARCO Supreme (xp)	
Merit Oil Corp.	Merit (r, xr, xp)	Merit Economy Merit 10W-40 Merit ATF
Mico Oil Co.	Mico (r, xr, p)	Fisca HD Fisca 10W-40
Midland Cooperatives (A)	Fire Power (r&p) Fire Power (x)	Lanco Midco Golden D Supreme
Mid Missouri Oil Co.	Shell (r, xr, xp)	Shell
Midwest Oil Co. (A)	Midwest (r&p) (x)	Moco Midwest Premium Midwest Hi-Det Midwest Hi-Det MF
Miller Oil Co.	Phillips (r, p, sp, xr, xp, xsp) Exxon (r, p, sp, xr, xp, xsp) †	Phillips Drydene Exxon Valvoline
Mobil Oil Corp.	Mobil Regular (r) Mobil Unleaded (xr) Mobil Super Unleaded (xp) Reelo (r, xr) † Reelo Super Unleaded (xp) † Sello (r, xr) † Sello Super Unleaded (xp) † Hi-Val (r, xr) † Hi-Val Super Unleaded (xp) † Big-Bi (r, xr) † Big-Bi Super (xp) † Lo-Lo (r, xr) Lo-Lo Super Unleaded (xp) †	Mobil Regular Mobil HD Mobil Special Mobil Super Mobil 1 (100% Synthetic)
Munford, Inc.	Gulf Texaco Amoco Citgo Spur Shell Marathon Majik Market 500	Gulf Texaco Amoco Citgo Spur Shell Marathon Majik Market 500
Murphy Oil Corp.	Spur (r) (xr, xp)	Spur Durable Spur HD Spur EMO

Brand Names (cont'd).

Gasoline	Motor Oil
National Oil & Gas Inc.	
Phillips (r, p, xr, xp) Cities Service (sp, xsp, other) Marathon (r, p, sp, other) † (xr, xp, xsp, x other) †	Phillips
R. B. Newman Fuel Corp.	
Neco (r, xr, xp)	Mobil
Orleans Oil Co. (A)	
Phillips 66 (r, p, sp, xr) Canal (r, p, sp, xr) †	Unique MM TropArtic HDS
Osceola Refining Co.	
TA Energy (r, xr, xp)	
Pacer Oil Co.	
Daisy (r, p, sp, other)	
Curtis Parker Oil Co.	
Amoco Regular (r) Amoco Lead Free (xr) Amoco Premium Lead Free (xsp)	AmoLube Amoco 200 Amoco M-V Amoco LDO
Peavey Oil Co.	
Texaco (r, p, sp, other)	Texaco Chevron Valvoline Pennzoil
Pennsylvania Petroleum Products Co. (A)	
	Quaker City Economy Quaker City Premium Quaker City HD Quaker City 10W-30 Quaker City 10W-40 Quaker City 20W-50 Quaker City HD 10W-50 Quaker City 15,000 Mile Quaker City Outboard Quaker City Racing Quaker City Dexron Quaker City Type F Quaker City Type A Brytol 10W-30, 10W-40, 10W-50, 20W-50
Pennzoil Co. (A)	
Pennzoil (r&p) Pennzoil (x)	Pennzoil Regular Pennzoil Z-7 Pennzoil Multivis, W/Z-7 PZL Extended Life
Pester Corp. (A)	
Pester (r, p, sp, other, xr, xp, xsp, x other) Pester (r) † Derby (xr) †	
Petroleum Sales & Service	
Amoco (r, p) (xr, xp)	Chevron Amoco Quaker State
Pettway Oil Co.	
Amoco (r, p, xr)	Cash-Carry AmoLube Amoco M.V. L.D.O.
Phillips Fuel Co.	
Texaco (r) (xr)	Texaco Havilands
Phillips Petroleum Co.	
Phillips 66 (r, xr, xp)	Unique MM Trop-Artic
Piasa Motor Fuels	
Conoco (r) (xr, xp)	Conoco
Port Oil	
Port (r, p, sp)	Port Regular Port HD Port 10W-40 Port Dextron ATF
Powerine Oil Co.	
Powerine (r, p, xr, xp) Coin-Op (r, p, xr, xp) †	
Power Test Corp.	
Power Test (r, xr) Super Power Test (xp)	Power Test Power Test HD Power Test All Seasons Power Test Powermatic ATF (Dexron) Power Test Powermatic ATF (Ford)
Pride Oil Co., Inc. (Tenn.)	
Tenneco (r, xr, xp) (diesel)	Kendall Pennzoil Quaker State Havoline
Private Brand Services, Inc.	
PBS (r, xr) PBS (r, xr) †	Pennzoil
Quaker State Oil Ref. Corp.	
Sterling (r) (xr)	Quaker State Regular Quaker State HD Quaker State HDX Universal Fleet Oil Quaker State Racing Oil Quaker State Super Blend Quaker State Deluxe Quaker State Sterling
Racetrac Petroleum	
Racetrac (r, xr, xp) Raceway (r, xr, xp) †	
Reinhardt Oil Corp.	
Sun (r, xr) Sunlight (xp)	
Remote Services (A)	
Convenient (r) (xr) Petco (r, xr) (xp) †	
Reynolds Industries	
Port (r, p, xr)	
River Oil Co.	
Phillips (r, mg)	Phillips
Rock Island Refining Corp.	
	Empire State Moto Lube Penn Lube Valvoline Quaker State
Rocket Oil Co.	
Rocket (r, xr, xp)	
Rogers Oil Co.	
Diamond (r&p) (xr)	
Romaco	
Parade (r, p, sp, other) (xr, xp, xsp, x other) † Citgo (r, p, sp, other) (xr, xp, xsp, other) † Fina (r, p, sp, other) (xr, xp, xsp, other) †	
Ryan DeWitt Corp.	
Exxon (r, p, sp, xr) Ashland (r) † Hess (xr) †	Exxon
Santee Oil Co., Inc.	
Shell (r, xr, xsp)	Fire & Ice X-100 Rotella Shell
Save-X, USA, Inc.	
Save-X (r, xr, xp) Serv-N-Save (r, xr, xp) †	Spur Havoline Quaker State
Shelby Petroleum Corp.	
Peer (r, p) (xr, xp) Bonus (r, p) (xr, xp) †	Bonus Regular Sail Premium Peer Premium Peer 10W-40
Shell Oil Co.	
Shell (r) Shell (xr) Shell Super (xp)	Shell Motor Oil Shell X-100® Shell Fire & Ice®
Shotmeyer Bros.	
Mobil (r, p, sp, other)	Mobil
The SICO Co.	
Amoco (r, p, sp) (xr, xp, xsp) ARCO (r, p, sp) (xr, xp, sp) † Texaco (r, p, sp) (xr, xp, sp) †	Citgo ARCO Valvoline Texaco Amoco
Sigmor Corp.	
See Diamond Shamrock	
Simmons Oil Corp.	
Simmons (r, p, sp) (xr, xp, xsp) Simmons (r, p, sp) (xr, xp, xsp) †	
Simon Oil Co.	
Sunoco (r, xr) Mobil (r, xr)	Sunoco Mobil
Sinclair Marketing (A)	
Sinclair Dino (r) Dino Supreme (p) Sinclair Unleaded (x)	Dino Econoil Dino Dinolene Dino Supreme
Smith-Shafer Oil Co.	
SS (r, xr, xp)	Chevron Quaker State
Standard Oil Co. (Indiana)	
Amoco (r, p, xr, xp)	Amoco Amolube Amoco 100 Amoco 200 Amoco 300
Standard Oil Co. (Ohio)	
Octron (r) Cetron (xp) Wm. Penn (r&p) (xr) Gas & Go (r, xr) †	Premex 10W-30 BP Extra Duty 10W-30 Nitrex MPG5W-40
J. D. Streett & Co.	
Zephyr (r, xr, xp) (diesel) Martin (x, xr, xp) †	Cardinal Outboard Zephyr HPX SA Zephyr Super Multipurpose Zephyr SMP All Weather Zephyr Super HD Zephyr LMO
Star Oil Co.	
Shell (r, p, sp)	Shell
Steuart Petroleum Co.	
Chevron (r, p, sp, diesel) (xr, xp, xsp) Steuart (r, p, sp, diesel) † (xr, xp, xsp)	Kendall Pennzoil Sun
Suburban Propane Gas Corp.	
Plateau (r, xr, xp) Malco (r, xr) †	
Sun Co.	
Regular (r) Regular Plus (xr) Super (xsp) Economy (x other) Regular (r, xr) † Premium (r, xr) †	Diamond Sun Lube Dynalube Special MPG Plus
Sunny Service Stations, Inc.	
Tanner Oil Co.	
Rich (r&xr) Rich Super Unleaded (xp)	Valvoline
Taylor Oil Co.	
Etna (r, xr, xp)	Etna Premium Etna 10W-40
Tenneco Oil Co. (A)	
Tenneco (r&p) (x) Direct (r&p) (other x) (†) Bay (r&p) (other x) (†) Trust (mg) (†) Caldor (mg) (†)	Shur-Lube Tenneco Special Detergent Tenneco ATF Direct Premium Tenneco Extra HD Tenneco Four Seasons
Herbst	
Terrible's Super (sp) Terrible's Ethyl (other) Terrible's Unleaded (other) (x)	
Tesoro Petroleum Corp. (A)	
Tesoro (r&p) (x)	
Texaco Inc.	
Texaco (r&sp) Texaco (xr&xsp) Texaco with Ethanol (r&xsp)	Texaco Havoline Havoline Supreme
Texas Star Oil Co.	
Texas Star (r) (xr) (xsp)	TSO Superior Golden Eagle TSO Fleet Lub.

Gasoline	Motor Oil
Thornhill Oil Co., Inc.	
Conoco (r, xr)	New Generation PAR Super
Thornton Oil Corp.	
	Thornton Pennzoil
Tooley Oil Co.	
Tooley's (r, p, xr, xp)	Pennzoil
Total Petroleum	
Total (r, p, sp, other) † (xr, xp, xsp, x other) † Apco (r, p, sp, other) † (xr, xp, xsp, x other) † Vickers (r, p, sp, other) † (xr, xp, xsp, x other) † Best (r, p, sp, other) † (xr, xp, xsp, x other) †	APCO Defiance Total Dura Lube Vickers Big Value Total Super HD Vickers Golden Supreme Total Superlube Total 500 Vickers 10W-40
Travelers Petroleum	
Self Way (r) (xr) (xp)	
Trenton Oil Co.	
Amoco (r, xp, xsp)	
UCO Oil Co. (A)	
UCO (r, mg&p) (x)	
Union Oil Co. of Calif.	
Union 76 (r) (xr) Union 76 Super (p) (xp)	Union Special Union Custom Union Premium Union High Performance Union Super Union Long Distance Purple
United Refining Co. (A)	
Keystone Powerfuel (r) Keystone Powerclean (xr) Keystone Powerlite (xp)	Powerlube Emblem
U.S.A. Oil (A)	
USA (r&p) (other x)	Saxon
USA Petroleum Corp. (A)	
USA (r&x) USA (p)	Rival USA Economy USA Premium USA All States
Valvoline Oil Co. (A)	
	Valvoline ND Valvoline HD Super HPO Valvoline HP Racing MO Valvoline All-Fleet Valvomatic Automatic Trans. Fluid Valvoline All-Climate HD Valvoline XLD
Wake Up Oil Co.	
Warelubco, Inc. (A)	
	Wareco Premium Wareco Plus Wareco Super All Season
Webaco Oil Co.	
Citgo (r, xr) Ashland (r, xr) †	Citgo
Webster Oil Co.	
Phillips (r, xr)	Trop Arctic All Brands
Wesson	
Western Marketing Inc. (A)	
Conoco (r, p, sp, other) (xr, xp, xsp, x other) Champlin (r, p, sp, other) (xr, xp, xsp, x other) †	Conoco (Fleet, Fleet Supreme, New Generation) Shell (Rotella, Rimula, Rotella T) Kendall
Western Petroleum Co. (A)	
Action (r&p) (x) U-Pump-It (r&p) (mg) (x)	
Wickland Oil Co.	
Regal (r, p) (xr) (xp) (sp)	Gold Shield Quaker Pennzoil
A. T. Williams Oil Co. (A)	
Wilco (r, p, sp)	Wilco
J. H. Williams Oil Co.	
Union 76 (r, xr, xsp)	Union Custom Union HD Union Premium Union Super Union High Performance Union Long Distanca Purple
Witco Chemical Corp. (A)	
	Kendall Dual Action Kendall Superb Kendall GT-1 Kendall F-L Select Kendall Super-D III (also makes and markets the following brand name) Amalie HD-1 Amalie 1-2-3 Amalie Imperial Amalie Pro
Young Oil Co.	
Young (r, p, sp)	
Zephyr	
Zephyr (r, xr, p, xp) (sp, xsp)	Zephyr XLL

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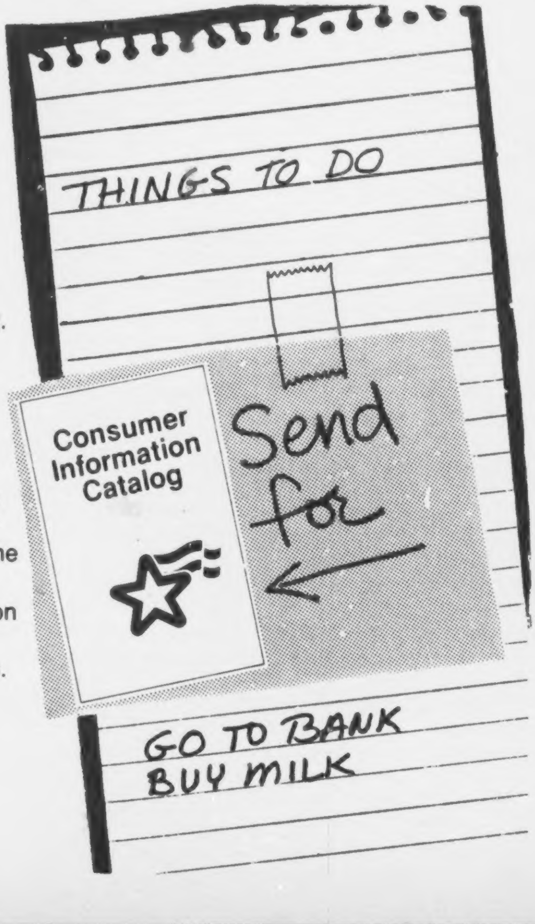

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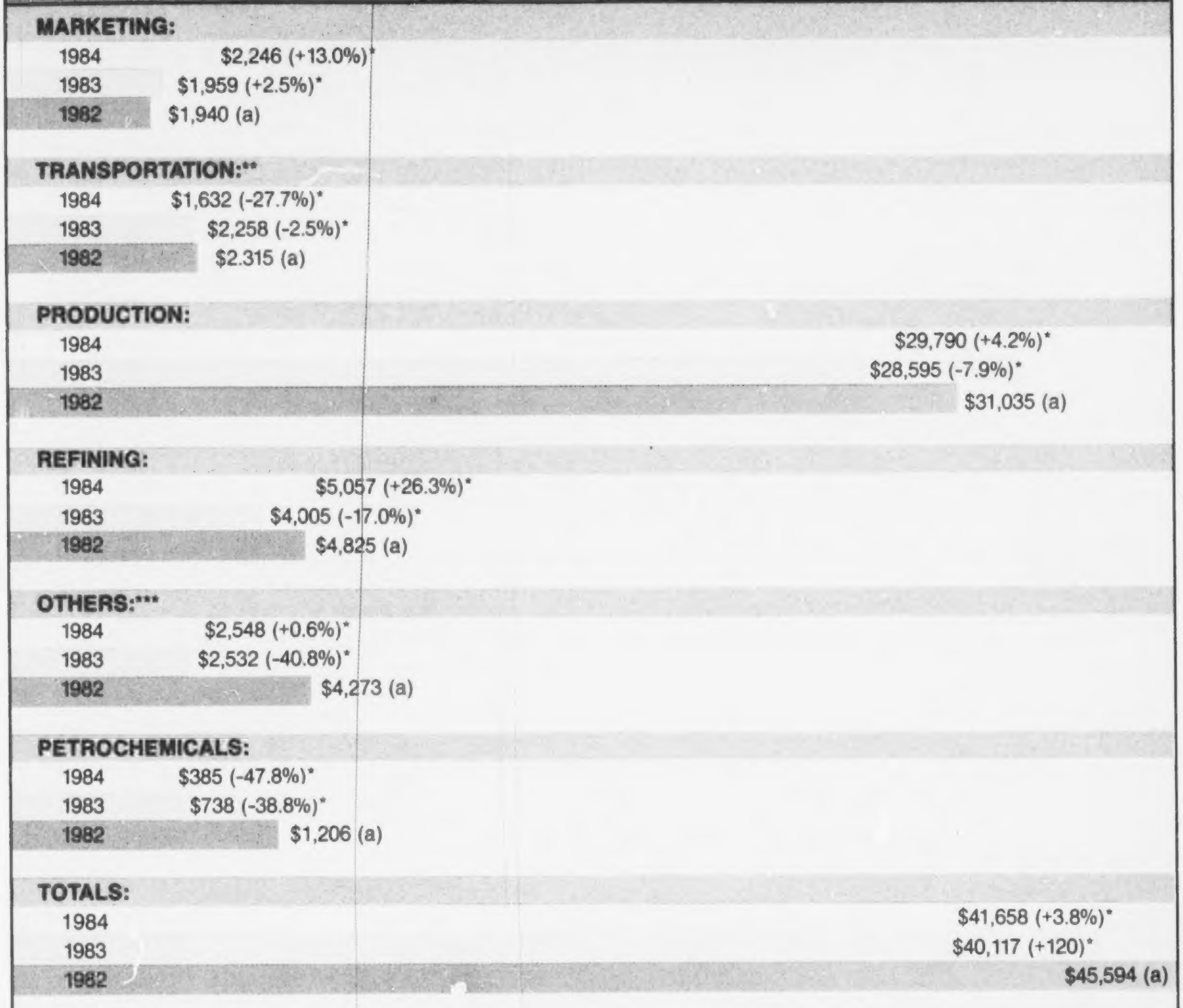
U.S. General Services Administration

Capital Spending by Marketing Industry (Millions of Dollars)



*Figures in parentheses indicate percentage of change from previous year's total. **Includes only oil pipelines, not gas.
***Includes coal mining. (a) Comparisons with prior years cannot be made inasmuch as the projection bases from 1981 on were changed materially and cannot be related.

Source: McGraw-Hill Economics Department, Nov. 1982.

Cutbacks Continue as Earnings Slump Anew

Declining earnings in 1982 and the expectations that 1983 would see more of the same prompted most oil companies to prune and re-prune their capital spending plans in the gathering gloom.

The annual forecast issued by McGraw-Hill's Economics Department in the fall of 1982 (above) was revised downward in the late spring—not heavily, but nevertheless on the negative side.

"There were many signs that a turnaround had gotten underway late in the first quarter of 1983, but whether it will be sustained and/or increased throughout the year remains to be seen.

The fuzz really came off the peach in the 1982 forecast that McGraw-Hill turned loose last fall. It seemed almost unbelievable when placed side-by-side with the optimistic projection it had made in late 1981.

In 1981, for example, McGraw-Hill predicted oil's capital spending would hit $56.6-billion in 1982 and $61.2-billion in 1983. The fall forecast downgraded the 1982 total to $45.6-billion; the 1983 total to $40.1-billion; and the 1984 outlook to $41.7-billion.

Exploration, production and refining bore the brunt of the 1982-84 cutbacks in last fall's projection.

The continuing surplus of crude oil and products discouraged drilling programs of the major companies at home and abroad. Similarly, with refineries bumping along at a 70% operating level and many being mothballed for that reason, the industry obviously had less appetite for major expenditures in this area.

Marketing, despite the slowdowns, seems to be faring reasonably well.

The 1981 projection indicated that the industry would spend about $2.4-billion on marketing projects in 1982 and $2.6-billion in 1983. The fall forecast called for $1.9-billion in 1982; $2.0-billion in 1983, and $2.2-billion in 1984.

Most of this funding was expected to go into the upgrading and modernization of service stations as well as expansion of self-serve pumper and convenience store facilities.

The projected marketing investments represent a 2.5% increase in 1983 over 1982, and a 13.0% increase in 1984 over 1983. The $2.2-billion that oil has earmarked for 1984 is a near record for any one year. The previous actual high was 1981 when marketing investments totaled $2.1-billion.

If the economy improves through 1983, it may be that McGraw-Hill's forecast next October will be on the sunny side again. As with 1981 and 1982, however, much will depend on oil company earnings in 1983.

Historical Overview: 34 Years of Capital Spending in the Oil Industry

	1981	Estimated 1982	Planned 1983	Planned 1984
Production	$31,233	$31,035	$28,595	$29,790
Transportation(a)	2,842	2,315	2,258	1,632
Refining	3,874	4,825	4,005	5,057
Petrochemicals	1,369	1,206	738	385
Marketing	2,121	1,940	1,989	2,246
Other(b)	3,853	4,273	2,532	2,548
Total Petroleum	**45,292**	**45,594**	**40,117**	**41,658**

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Production	$ 3,356	$ 4,098	$ 4,307	$ 6,803	$ 8,925	$11,144	$12,593	$14,986	$17,039	$21,423
Transportation(a)	572	532	708	907	1,681	1,832	1,191	989	1,473	2,001
Refining	1,232	1,062	1,013	1,716	2,275	2,531	2,025	2,071	3,070	3,378
Petrochemicals	361	300	339	729	847	1,092	1,245	1,239	946	1,053
Marketing	1,322	1,110	777	614	632	632	790	1,616	1,433	1,814
Other(b)	510	570	610	860	1,070	970	1,450	1,920	2,140	2,850
Total Petroleum	**7,353**	**7,672**	**7,754**	**11,629**	**15,430**	**18,201**	**19,294**	**22,821**	**26,101**	**32,519**

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Production	$ 3,458	$ 3,382	$ 2,990	$ 3,584	$ 3,382	$ 3,788	$ 3,595	$ 3,980	$ 4,581	$ 3,541
Transportation(a)	321	286	249	319	249	321	414	542	526	615
Refining	459	433	385	384	565	631	956	1,019	1,023	1,152
Petrochemicals	260	252	340	173	343	597	561	600	564	564
Marketing	533	538	560	655	747	926	1,065	1,097	1,141	1,392
Other(b)	132	154	168	281	365	310	453	408	416	510
Total Petroleum	**5,163**	**5,045**	**4,692**	**5,396**	**5,651**	**6,573**	**7,044**	**7,646**	**8,251**	**7,774**

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Production	$ 2,388	$ 2,754	$ 2,779	$ 2,992	$ 3,500	$ 3,593	$ 3,603	$ 3,203	$ 3,474	$ 3,339
Transportation(a)	300	400	450	350	249	261	423	317	276	306
Refining	339	446	661	686	590	694	877	657	402	455
Petrochemicals	NA	NA	NA	NA	NA	NA	NA	NA	115	150
Marketing	300	280	325	350	364	426	426	404	461	498
Other(b)	50	50	50	50	45	67	70	92	90	94
Total Petroleum	**3,377**	**3,930**	**4,265**	**4,428**	**4,748**	**5,041**	**5,399**	**4,673**	**4,818**	**4,842**

(a) Includes oil pipelines but not gas pipelines; (b) includes coal mining.

Source: McGraw-Hill Publications Co., Department of Economics. The figures in the tables represent capital spending of integrated petroleum companies in the mining, transportation, and retail trade sectors. The figures are not comparable with the petroleum figures in McGraw-Hill's regular capital spending report, in which the petroleum category includes spending of refiners and integrated companies only.

How Oil Companies Handle

			BRANDED SERVICE STATIONS					
MAJOR OIL COMPANIES	TOTAL BRANDED RETAIL OUTLETS†	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	Total true branded service stations	Supplied directly	Supplied through jobbers and commission agents	Lessee/ dealer operated	Salary operated	Commission operated
Amoco Oil Co.	17,765(N)	44	NA	5,934	NA	NA	143	0
Atlantic Richfield	5,260(P)	26	5,260	3,592	1,668	NA	NA	NA
Chevron USA	12,403	41	7,679	5,364	2,315	7,591	88	0
Exxon Co., USA	20,119(C)	41	20,119(D)	8,082	12,037	NA	NA	NA
Gulf Oil Co., USA	14,598	—	14,598	5,689	8,909	13,949	649	—
Mobil Oil Corp.	16,216(Q)	44	NA	NA	NA	NA	NA	NA
Shell Oil Co.	12,282	40	12,282	5,353	6,929	5,207	146	—
Texaco, Inc.	18,692	45	17,758	4,409	13,042	13,042	3	304
SEMI-MAJOR OIL COMPANIES								
Ashland Petroleum Co.	194	8	194	37	157	194	0	0
Cities Service Co.	4,727	32	833	833	0	76	354	403
Conoco, Inc.	4,702	28	NA	NA	NA	NA	NA	NA
Diamond Shamrock Corp.	1,847	24	1,847	549	1,298	1,300	546	1
Getty Refining & Marketing Co.	4,494	28	4,494	2,002	2,492	4,141	353	0
Kerr-McGee Refining Corp.	1,814	18	1,778	24	1,754	7	17	0
Marathon Oil Co.	2,209	6	2,187(H)	626(I)	1,659	486(I)	0	0
Murphy Oil Co.	717	14	717	563	154	237	0	0
Phillips Petroleum Co.	12,035(T)	38	12,035(K)	222(K)	11,813(K)	NA	222	NA
Standard Oil Co. (Ohio) (xxx)	2,200	20	NA	NA	NA	NA	NA	NA
Sun Co., Inc.	7,866	30	7,230	4,204	3,026	7,090	140	—
Tenneco Oil Co. (xxx)	484	17	484	484	—	16	468	—
Union Oil Co. of Calif.	12,669	45	9,609	3,053	6,556	2,415	138	0(L)
INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS								
Ada Resources	165	1	166	86	79	139	26	0
Agway Petroleum Corp. (xxx)	283	9	264	264	—	129	133	2
American Petrofina	4,201(M)	20	3,361	0	3,361	0	0	0
Amos Post, Inc.	33	1	33	26	7	6	8	5
Arkla Chemical Corp.	4	2	3	3	0	3	1	0
Armour Oil Co.	75	7	—	—	—	—	—	—
Asamera Oil, Inc. (U.S.)	93(O)	10	93	93	0	66	26	1
Atlas Oil Co. of Utica, Inc. (xxx)	7	1	7	7	0	3	—	—
The Augsbury Corp.	133	2	133	100	30	12	37	8
Automatic Comfort Corp.	53	1	21	21	0	21	0	0
Bagwell Oil Co.	18	2	4	4	0	4	0	0
E. M. Bailey Distributing Co.	86	1	60	60	0	20	25	15
Beacon Oil Co.	292	2	292	124	168	65	55	178
Best Oil Inc.	3	1	3	—	—	—	—	—
Bray Terminals Inc. (xxx)	54	1	54	6	49	49	6	—
Brennan Petroleum	3	1	3	3	0	0	3	0
Browning Oil Co.	17	1	16	16	0	3	6	7
By-Lo Oil Co. (xxx)	15	1	4	4	0	0	4	0
Campbell Oil Co.	54(R)	1	33	33	0	16	0	0
Caribou Four Corners (xxx)	60	10	—	—	—	—	—	—
Cel Oil Products Corp.	16(T)	1	8	8	0	3	5	0
Cenex	1,177	14	1,050	1,050	0	1,010	40	0
Certified Oil Co.	210	3	—	—	—	—	—	—
Champlin Petroleum Co. (xxx)	863	18	445	445	—	72	369	4
Charter Management Inc.	10	2	10	10	0	0	10	0
Charter Oil Co.	320(U)	6	320	320	—	0	318	2
Cheker Oil Co.	318(V)	16	381	381	0	7	357	17
Citadel Corp. (xxx)	11	3	11	11	—	—	—	—
Coen Oil Co.	200	1	150	150	0	148	1	1
Colonial Oil Industries, Inc.	71(W)	3	71	71	0	0	71	0
Como Oil Co. (xxx)	30	1	30	30	—	29	1	—
Conna Corp.	285(a)	11	285	285	0	0	16	269
Consumers Gasoline Stations	34(Y)	2	34	34	0	—	—	—
Consumers Oil Corp.	16	2	16	16	0	4	11	1
Consumers Petroleum Co.	20	1	—	—	—	—	—	—
Cook & Cooley, Inc.	100	1	—	—	—	—	—	—
Crown Central Petroleum Co.	NA	8	0	All	—	—	—	—
Crystal Flash Petroleum	32(Z)	2	32	32	0	0	32	0
Crystal USA Oil Co.	116	9	0	101	0	101	15	0
C.S.C. Oil Corp.	22	2	16	16	0	0	16	0
K. E. David, Ltd.	8	1	—	—	—	—	—	—
Dead River Co. (xxx)	135	2	50	50	—	48	0	2
DeBlois Oil Co. (xxx)	43	2	37	37	—	18	16	3
Delta Marketing Co.	337	12	337	337	0	18	319	0
Derby Refining Co.	520	12	510	130	380	—	—	—
Diamond Shamrock Corp. (formerly Sigmor)	1,847	24	1,847	549	1,298	1,300	546	1
Dixie Oil Co. (xxx)	97	3	97	—	—	—	97	—
Dominion Oil Co.	26(b)	1	18	18	0	18	0	0
Drake's Refinery Stations, Inc.	12	1	12	12	0	0	12	0
East Coast Oil Corp.	32	1	32	32	0	0	32	0
Elm City Filling Stations, Inc. (xxx)	60	1	60	60	0	51	8	1
Englefield Oil Co.	77	2	—	—	—	—	—	—

(*) Total branded retail outlets include garages, motels, C-stores, and service stations. By U.S. Census Bureau definition, only establishments generating 50% or more of their income from the sale of petroleum products and services are service stations.

(†) Total number of states where gasoline is branded includes the District of Columbia.

(xxx) Latest data available. Company either did not respond to the 1983 questionnaire or did not answer all of the questions fully.

(A) Full-line.

(B) Branded heating fuel.

Product Distribution

			BRANDED JOBBERS				COMMISSION AGENTS			
				NUMBER SELLING . . .				NUMBER SELLING . . .		
100% full service	100% self service	Service and self service	Total	Gasoline only	Fuel oil only	Gasoline/ fuel oil	Total	Gasoline only	Fuel oil only	Gasoline/ fuel oil
NA	NA	NA	1,961	NA	NA	1,961	2	NA	NA	2
NA	NA	NA	189	189	0	0	0	0	0	0
3,769	208	3,702	777	457(A)	96(B)	224(C)	87	—	—	87
NA	NA	NA	972	26	0	946	3	0	0	3
—	—	—	1,715	14	921	780	49	—	—	—
NA	NA	NA	1,996	46	655	1,295	36	0	0	36
943	1,150	3,260	612	0	12	600	0	0	0	0
NA	NA	NA	1,176	NA	NA	NA	6	NA	NA	NA
184	0	10	36	6	5	25	159	0	0	159
42	708	83	350	0	0	350	0	0	0	0
NA	NA	NA	830	NA	NA	NA	0	0	0	0
NA	NA	NA	150	—	—	—	1	1	0	0
—	—	—	582	0	0	582	—	—	—	—
50	100	1,628	429	97	58	274	0	0	0	0
902	101	1,184	79	0	9	70	0	0	0	0
80	560	77	0	0	0	0	0	0	0	0
NA	NA	NA	1,693	NA	NA	NA	2	0	0	2
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	0	0	0	0
9	443	32	25	25	—	—	3	3	—	—
2,393	2,180	5,036	431	0	0	431	27	0	0	27
139	26	0	19	0	0	19	3	0	0	3
6	256	2	31	5	3	23	2	2	—	—
1,008	840	1,513	445	378	0	67	0	0	0	0
22	7	4	2	1	0	1	—	—	—	—
2	1	1	2	0	0	2	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
0	89	4	0	0	0	0	0	0	0	0
7	—	—	0	—	—	—	—	—	—	—
50	73	10	3	0	0	3	0	0	0	0
21	—	—	0	0	0	0	7	7	0	0
4	—	—	NA	—	—	—	0	0	0	0
17	33	10	—	—	—	—	6	—	—	6
66	203	23	45	45	0	0	0	0	0	0
0	3	0	0	0	0	0	0	0	0	0
54	—	—	87	12	75	87	—	0	0	0
0	3	0	0	0	0	0	0	0	0	0
0	2	14	0	0	0	0	0	0	0	0
4	—	—	0	—	—	—	0	—	—	—
40	2	11	0	0	0	0	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
8	0	0	0	0	0	0	0	0	0	0
0	470	580	900	0	0	900	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
NA	NA	NA	304	NA	NA	NA	0	0	0	0
0	10	0	NA	NA	NA	NA	0	0	0	0
—	320	—	0	—	—	—	2	2	0	0
12	386	6	0	0	0	0	0	0	0	0
—	—	0	—	—	—	—	0	—	—	—
—	—	—	0	—	0	0	0	0	0	0
5	9	57	0	0	0	0	0	0	0	0
13	1	16	—(X)	—	—	—	0	—	—	—
11	274	0	0	0	0	0	0	0	0	0
14	18	1	0	0	0	0	0	0	0	0
5	0	11	0	0	0	0	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
0	22	10	0	0	0	0	0	0	0	0
0	99	17	0	0	0	0	0	0	0	0
3	6	7	0	0	0	0	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
50	0	0	0	—	—	—	2	2	—	—
28	9	—	0	—	—	—	3	3	—	—
0	327	10	0	0	0	0	0	0	0	0
1	68	58	86	0	0	86	0	0	0	0
NA	NA	NA	150	—	—	—	1	1	0	0
—	50	40	90	50	—	40	—	—	—	—
0	0	18	0	0	0	0	0	0	0	0
1	11	0	0	0	0	0	0	0	0	0
2	22	8	0	0	0	0	0	0	0	0
57	3	—	1	—	—	1	1	1	—	—
—	—	—	—	—	—	—	—	—	—	—

(C) Branded lube oil.
(D) Retail outlets.
(E) Estimated.
(F) Total wholesale distribution plants, including terminals.

(G) Terminals and bulk plants.
(H) Total retail gasoline outlets minus car washes and L&K's/Nickerson Farms.
(I) Dealer transported delivered and temporarily closed units and sellers and owner ops.
(J) 15 privately owned.

How Oil Companies Handle

	BULK PLANTS				TERMINALS			
		COMPANY OPERATED				COMPANY OPERATED		
MAJOR OIL COMPANIES	Total	Salary operated	Commission operated	Jobber operated bulk plants	Total	Salary operated	Commission operated	Jobber operated terminals
Amoco Oil Co.	16	16	0	2,408	84	84	0	2
Atlantic Richfield	0	0	0	NA	45	45	0	NA
Chevron USA	93	—	93	666	100	100	0	26
Exxon Co., USA	3	0	3	NA	79	79	0	NA
Gulf Oil Co., USA	3	3	0	—	85	85	0	—
Mobil Oil Corp.	327(F)	98	229	1,857	98	98	0	—
Shell Oil Co.	88	88	0	900	24	—	—	0
Texaco, Inc.	1,495	0	5	1,490	85	85	—	NA
SEMI-MAJOR OIL COMPANIES								
Ashland Petroleum Co.	144	6	138	27	39	39	0	0
Cities Service Co.	0	0	0	—	32	32	0	20
Conoco, Inc.	0	0	0	NA	62	NA	NA	NA
Diamond Shamrock Corp.	0	0	0	NA	12	12	0	0
Getty Refining & Marketing Co.	—	—	—	—	33(G)	30	3	—
Kerr-McGee Refining Corp.	1	1	0	50	3	3	0	1
Marathon Oil Co.	1	1	0	3	48	48	0	0
Murphy Oil Co.	0	0	0	—	22	22(J)	0	0
Phillips Petroleum Co.	7	5	2	1,900	31	31	0	4
Standard Oil Co. (Ohio) (xxx)	NA	NA	NA	NA	NA	NA	NA	NA
Sun Co. Inc.	NA	NA	NA	—	40	NA	NA	—
Tenneco Oil Co. (xxx)	0	0	0	0	11	11	—	0
Union Oil Co. of Calif.	198	27	171	524	57	55	2	1
INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS								
Ada Resources	4	2	2	19	0	0	0	0
Agway Petroleum Corp. (xxx)	129	129	—	28	12	12	—	0
American Petrofina	0	0	0	378	11(G)	11	0	0
Amos Post, Inc.	4	4	—	2	—	—	—	—
Arkla Chemical Corp.	3	3	0	2	0	0	0	0
Armour Oil Co.	—	—	—	—	—	—	—	—
Asamera Oil Inc., (U.S.)	0	0	0	0	0	0	0	—
Atlas Oil Co. of Utica, Inc. (xxx)	0	—	—	—	1	—(Q)	—	0
The Augsbury Corp.	8	5	3	3	7	7	0	0
Automatic Comfort Corp.	2	2	0	0	2	2	0	0
Bagwell Oil Co.	1	1	0	—	1	1	0	—
E. M. Bailey Distributing Co.	3	0	3	—	1	1	0	—
Beacon Oil Co.	0	0	0	17	1	1	0	0
Best Oil Inc.	0	0	0	—	0	0	0	—
Bray Terminals Inc. (xxx)	2	2	0	5	2	2	0	—
Brennan Petroleum	0	0	0	0	0	0	0	0
Browning Oil Co.	1	1	0	—	0	0	0	—
By-Lo Oil Co. (xxx)	1	—	—	0	0	0	0	0
Campbell Oil Co.	3	3	0	2	0	0	0	0
Caribou Four Corners (xxx)	—	—	—	—	—	—	—	—
Cel Oil Products Corp.	1	1	0	—	0	0	0	—
Cenex	40	40	0	860	7	7	0	0
Certified Oil Co.	6	6	0	0	1	1	0	0
Chamberlain Petroleum Co. (xxx)	0	0	0	NA	6	6	—	NA
Charter Management Inc.	0	0	0	—	0	0	0	—
Charter Oil Co.	0	0	0	0	0	0	0	0
Cheker Oil Co.	0	0	0	0	—	—	—	0
Citadel Corp. (xxx)	0	—	—	—	0	—	—	—
Coen Oil Co.	1	1	0	0	0	0	0	—
Colonial Oil Industries, Inc.	2	2	0	—	2	2	0	—
Como Oil Co. (xxx)	1	—	—	—	0	—	—	—
Conna Corp.	0	0	0	0	0	0	0	—
Consumers Gasoline Stations	0	0	0	—	0	0	0	—
Consumers Oil Corp.	—	—	—	—	—	—	—	—
Consumers Petroleum Co.	—	—	—	—	—	—	—	—
Cook & Cooley, Inc.	0	0	0	—	1	1	0	—
Crown Central Petroleum Co.	—	—	—	—	—	—	—	—
Crystal Flash Petroleum	5	5	0	—	0	0	0	—
Crystal USA Oil Co.	—	—	—	—	—	—	—	—
C.S.C. Oil Corp.	0	0	0	—	0	0	0	—
K. E. David, Ltd.	3	3	0	—	—	—	—	—
Dead River Co. (xxx)	17	17	—	NA	1	1	—	NA
DeBlois Oil Co. (xxx)	4	4	0	0	0	0	0	0
Delta Marketing Co.	0	0	0	—	0	0	0	—
Derby Refining Co.	0	0	0	0	0	0	0	—
Diamond Shamrock Corp. (formerly Sigmor)	0	0	0	NA	12	12	0	0
Dixie Oil Co. (xxx)	—	—	—	—	—	—	—	—
Dominion Oil Co.	2	2	0	—	0	0	0	—
Drake's Refinery Stations, Inc.	0	0	0	—	0	0	0	—
East Coast Oil Corp.	0	0	0	0	0	0	0	0
Elm City Filling Stations, Inc. (xxx)	1	1	—	0	1	1	—	0
Englefield Oil Co.	—	—	—	—	—	—	—	—

(K) May not fit the 50% category but are identified as service stations.
(L) Other; 7,056 (non-lessee dealer, ship-shore/PX, jobber served nondealer.)
(M) Includes American Petrofina Marketing, Porto Fina Oil Co., and Finaserve, Inc.
(N) Includes Omega Oil Co.
(O) Includes Gasamat Oil Corp.

(P) Includes Prestige Stations, Inc.
(Q) Company operated.
(R) Includes Steiner Oil Co.
(S) Direct supplied stations only. Data not available for jobber supplied.
(T) Includes Gas-Up, Inc.

Product Distribution (cont'd.)

INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS	TOTAL BRANDED RETAIL OUTLETS†	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	BRANDED SERVICE STATIONS					
			Total true branded service stations	Supplied directly	Supplied through jobbers and commission agents	Lessee/dealer operated	Salary operated	Commission operated
Farm Stores, Inc. (xxx)	60	1	—	—	—	—	—	—
Farmland Industries, Inc. (xxx)	930	11	930	—	—	—	—	—
FCX, Inc.	98	2	0	—	—	—	—	—
Fireline Petroleum	450	10	NA	NA	NA	NA	NA	NA
Fisca Oil Co., Inc.	103	22	104	104	0	0	104	0
Flying J, Inc. (xxx)	86	9	68	71	—	—	63	8
Don Foster Oil Co.	41	1	13	13	—	13	—	—
Franks Oil Co.	92	3	—	—	—	—	—	—
Gas-N-Go, Inc.	1	1	0	0	0	0	0	0
Gasco Gasoline	120	1	120	103	17	16	86	18
Gem Petroleum—Stop & Go	284(e)	2	284	236	48	0	284	0
General Oil Co.	51	2	51	51	0	—	—	—
Giant Industries, Inc.	18	2	18	18	0	0	18	0
Golden Gate Petroleum Co.	3(f)	1	3	3	0	0	3	0
Golden Imperial, Inc.	45	1	45	45	0	0	45	0
Golub Corp.	14	2	14	14	0	0	14	0
Gresham Petroleum Co.	16	1	6	6	0	2	4	0
Growmark, Inc.	260	3	160	0	160	80	80	0
Gull Industries	103	2	103	103	0	0	5	98
Harrell Petroleum Co. (xxx)	27	1	16	—	—	9	6	1
Harris Enterprises, Inc.	NA	2	—	—	—	—	—	—
Heathwood Oil Co.								
Higgins Oil Co., Inc. (g)								
Highland Petroleum Inc.	NA	6	—	—	—	—	—	—
Highway Oil, Inc.	218(h)	25	218	174	44	0	218	0
Angus J. Hines, Inc.	51	1	4	—	—	—	—	—
Hi-Quality Lo-Cost Svc. Stations, Inc. (Bought by Taylor Petroleum, Amarillo, Tx.)								
Barney Holland Oil Co.	58	1	42	37	5	41	1	0
Hop-In Food Stores, Inc.	150	3	130	79	51	0	130	0
Horkey Oil Co., Inc.	25(i)	1	22	0	22	10	12	0
Horn Distributing Co.	22	1	22	0	22	19	0	3
Hudson Oil Co.	265	NA	NA	NA	NA	NA	NA	NA
Hughes Oil Co.	120	1	50	50	0	48	2	0
Hull Oil Co.	22	2	22	22	0	4	12	6
Husky Oil Co. (xxx)	562	17	562	45(j)	55(j)	562	0	0
J & L Oil, Inc.	81	5	—	—	—	—	—	—
J. S. & J. Service, Inc.	19(k)	2	19	19	0	0	19	0
Johnson Products (xxx)	95	6	65	—	—	—	65	—
Kellet Oil Co.	20	3	17	75(j)	—	16	4	0
Kent Oil Co.	20	1	0	20	0	7	11	2
Key Energy Enterprises, Inc.	100	3	100	100	—	—	10	90
Kimber-Allen Petroleum Corp.	180(l)	1	180	162	18	150	30	0
Kimbro Oil Co. (xxx)	40	1	40	40	0	38	2	0
Kingston Oil Supply Corp.	13	1	13	13	0	13	0	0
Krause Gentle Oil Corp. (xxx)	52	1	52	52	—	8	44	—
Kwik Shop, Inc.	100	3	100	98	2	0	82	18
Lake Shore Oil Co. (xxx)	30	1	30	30	—	30	—	—
Land 'O Lakes	393	6	254	251	3	250	4	0
Lido Co. of New England	97(n)	3	97	97	0	35	62	0
Little Oil Co.	43	1	12	0	12	12	0	0
Lokey Oil Co.	34	1	34	34	0	34	0	0
Main Bros. Oil Co., Inc. (xxx)	30	1	10	10	—	10	—	—
Malco Products, Inc. (xxx)	73	3	73	47	26	59	11	3
Marshall Oil Co. (xxx)	50	1	50	17	—	18	7	8
Martin Oil Marketing Ltd.	132(o)	11	132	132	0	1	131	0
McDowell Oil Service, Inc.	28	1	3	3	0	3	—	—
Meenan Oil Co., Inc. (xxx)	1(p)	1	1	1	—	—	1	—
Merit Oil Corp.	NA	11	—	—	—	—	—	—
Merritt Truax, Inc.	49	1	49	49	0	37	6	6
Mico Oil Co., Inc.	28	15	28	28	0	0	28	0
Mid-Missouri Oil Co.	7	1	3	3	0	1	2	0
Mid-States Petroleum, Inc.	72	3	—	—	—	—	—	—
Miller & Holmes, Inc.	NA	NA	NA	NA	NA	NA	NA	NA
Miller Oil Co. (Norfolk)	16	1	5	3	—	2	—	—
Miller Oil Co. (Toledo)	4	1	4	4	0	3	1	0
Monarch Oil & Supply, Inc. (xxx)	25	1	25	25	—	24	1	—
Munford, Inc.	485(r)	13	0	0	0	0	0	0
Musket Corp.	120	9	120	120	0	0	120	0
National Convenience Stores, Inc. (xxx)	131	39	0	—	—	—	—	—
National Oil & Gas, Inc.	60	2	57	52	5	46	1	10
Neal, Inc.	44	1	2	2	0	2	0	0
Newell Oil Co., Inc.	14	1	14	14	0	11	2	1
R. B. Newman Fuel Corp.	14	1	0	0	0	0	0	0
Orleans Oil Co.	22	1	7	7	0	7	0	0
Osceola Refining Co.	13	1	13	12	1	11	2	0
Pacer Oil Co.	15	2	15	15	0	3	12	0
Parker Oil Co., Inc.	255	2	10	10	0	10	0	0

(U) Includes Charter Marketing Co.
(V) Includes Cheker Imperial Oklahoma.
(W) Includes Colonial Interstate, Interstate stations.
(X) They are a Phillips jobber.

(Y) Includes Scot Oil.
(Z) Includes Michigan Crystal Flash.
(a) Includes Convenient Gasoline and Petco Oil Co.
(b) Includes Yates Bowles.

How Oil Companies Handle

(. . . continued) BRANDED SERVICE STATIONS			BRANDED JOBBERS				
				NUMBER SELLING . . .			
100% full service	100% self service	Service and self service	Total	Gasoline only	Fuel oil only	Gasoline/ fuel oil	INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS
—	—	—	—	—	—	—	**Farm Stores, Inc. (xxx)**
—	—	—	930	—	—	—	**Farmland Industries, Inc. (xxx)**
—	—	—	NA	NA	NA	NA	**FCX, Inc.**
NA	NA	NA	NA	NA	NA	NA	Fireline Petroleum
57	46	1	0	0	0	0	Fisca Oil Co., Inc.
3	65	3	0	—	—	—	Flying J, Inc. (xxx)
27	13	1	32	7	0	7	**Don Foster Oil Co.**
—	—	—	—	—	—	—	**Franks Oil Co.**
0	0	0	0	0	0	0	**Gas-N-Go, Inc.**
7	106	7	3	3	0	0	Gasco Gasoline
0	284	0	7	0	0	7	Gem Petroleum—Stop & Go
0	45	6	—	—	—	—	General Oil Co.
0	18	0	—	—	—	—	**Giant Industries, Inc.**
0	3	0	1	0	0	1	**Golden Gate Petroleum Co.**
6	13	26	0	0	0	0	**Golden Imperial, Inc.**
7	7	0	—	—	—	—	Golub Corp.
2	3	1	NA	NA	NA	NA	Gresham Petroleum Co.
130	0	30	112	0	0	112	Growmark, Inc.
28	75	0	0	0	0	0	**Gull Industries**
10	4	2	—	—	—	—	**Harrell Petroleum Co. (xxx)**
—	—	—	0	—	—	—	**Harris Enterprises Inc.**
							Heathwood Oil Co.
							Higgins Oil Co., Inc. (G)
—	—	—	—	—	—	—	Highland Petroleum Inc.
125	44	50	0	0	0	0	**Highway Oil, Inc.**
—	—	—	—	—	—	—	**Angus J. Hines, Inc.**
							Hi-Quality Lo-Cost Svc. Stations, Inc. (Bought by Taylor Petroleum, Amarillo, Tx.)
29	4	9	1	0	0	1	Barney Holland Oil Co.
0	130	0	0	0	0	0	Hop-In Food Stores, Inc.
0	13	12	1	1	0	0	Horkey Oil Co., Inc.
0	2	20	0	0	0	0	**Horn Distributing Co.**
NA	NA	NA	NA	NA	NA	NA	**Hudson Oil Co.**
4	2	44	0	0	0	0	**Hughes Oil Co.**
2	20	0	0	0	0	0	Hull Oil Co.
227	285	50(E)	140	—	—	140	Huskey Oil Corp. (xxx)
—	—	—	0	—	—	—	J & L Oil, Inc.
0	19	0	0	0	0	0	**J. S. & J. Service, Inc.**
35	—	30	0	—	—	—	**Johnson Products (xxx)**
3	4	10	1	0	0	1	**Kellet Oil Co.**
0	19	1	—	—	—	—	Kent Oil Co.
—	—	100	140	0	0	140	Key Energy Enterprises, Inc.
180	0	0	1	1	0	0	Kimber-Allen Petroleum Corp.
—	2	38	1	—	—	—	**Kimbro Oil Co. (xxx)**
12	1	0	—	—	—	—	**Kingston Oil Supply Corp.**
—	—	52	0	—	—	—	**Krause Gentle Oil Corp. (xxx)**
0	100	0	0	0	0	0	Kwik Shop, Inc.
80(j)	—	20(j)	NA(m)	—	—	—	Lake Shore Oil Co. (xxx)
132	42	80	312	27	0	285	Land 'O Lakes
94	3	0	1	—	—	—	**Lido Co. of New England**
6	4	2	0	0	0	0	**Little Oil Co.**
0	0	34	—	—	—	—	**Lokey Oil Co.**
10	—	—	0	—	—	—	Main Bros. Oil Co., Inc. (xxx)
0	73	—	7	7	0	—	Malco Products Inc. (xxx)
—	—	50	—	—	—	—	Marshall Oil Co. (xxx)
2	130	0	—	—	—	—	**Martin Oil Marketing Ltd.**
3	0	—	—	—	—	—	**McDowell Oil Service, Inc.**
1	—	—	0	—	—	—	**Meenan Oil Co., Inc. (xxx)**
—	—	—	—	—	—	—	Merit Oil Corp.
49	—	—	3	0	0	3	Merritt Truax, Inc.
26	2	0	0	0	0	0	Mico Oil Co., Inc.
0	2	1	0	0	0	0	**Mid-Missouri Oil Co.**
—	—	—	—	—	—	—	**Mid-States Petroleum, Inc.**
NA	NA	NA	NA	NA	NA	NA	**Miller & Holmes, Inc.**
0	0	5	0	0	0	0	Miller Oil Co. (Norfolk)
0	3	1	0	0	0	0	Miller Oil Co. (Toledo)
23	1	1	1	—	1	—	Monarch Oil & Supply, Inc. (xxx)
0	0	0	0	0	0	0	**Munford, Inc.**
0	120	0	0	0	0	0	**Musket Corp.**
—	—	—	1	1	—	—	**National Convenience Stores, Inc. (xxx)**
7	0	50	0	0	0	0	National Oil & Gas, Inc.
2	0	0	—	—	—	—	Neal, Inc.
4	6	4	1	—	—	—	Newell Oil Co., Inc.
0	0	0	0	0	0	0	**R. B. Newman Fuel Corp.**
7	0	0	1	1	0	0	**Orleans Oil Co.**
7	6	0	0	0	0	0	**Osceola Refining Co.**
3	12	0	—	—	—	—	Pacer Oil Co.
6	0	4	5	0	0	5	Parker Oil Co., Inc.

(c) Includes Alert Division.
(d) Most agents pull only propane.
(e) Includes Gem Petroleum and Payless Oil.
(f) Includes Bay Area Petroleum and Holdener Petroleum.

(g) Private brand.
(h) Includes Hi-Lo Oil Co. and Workingman's Friend Oil, Inc.
(i) Includes Petrotex Marketing.
(j) Percent.

Product Distribution (cont'd.)

COMMISSION AGENTS				BULK PLANTS				TERMINALS			
	NUMBER SELLING . . .				COMPANY OPERATED				COMPANY OPERATED		
Total	Gasoline only	Fuel oil only	Gasoline/ fuel oil	Total	Salary operated	Commission operated	Jobber operated bulk plants	Total	Salary operated	Commission operated	Jobber operated terminals
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
NA	NA	NA	NA	22	22	0	—	NA	NA	NA	—
NA	NA	NA	NA	NA	NA	NA	NA	—	1	—	—
0	0	0	0	0	0	0	0	0	0	0	0
26(d)	—	—	6	5	3	2	—	⅞	—	—	—
0	0	0	0	2	2	0	0	0	0	0	0
—	—	—	—	2	0	2	—	—	—	—	—
0	0	0	0	0	0	0	—	0	0	0	—
18	18	0	0	0	0	0	—	—	—	—	—
7	0	0	7	0	—	—	7	0	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	1	1	0	—
0	0	0	0	3	3	0	—	5	0	5	—
0	0	0	0	0	0	0	—	0	0	0	—
—	—	—	—	—	—	—	—	—	—	—	—
NA	NA	NA	NA	4	4	0	NA	0	0	0	0
0	0	0	0	—	—	—	285	3	3	0	0
0	0	0	0	0	0	0	—	0	0	0	0
0	—	—	—	0	—	—	—	0	—	—	—
0	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
0	0	0	0	0	0	0	0	0	0	0	0
—	—	—		6	6	0	—	—	—	—	—
0	0	0	0	1	1	0	1	0	0	0	0
0	0	0	0	0	0	0	—	0	0	0	—
—	—	—	—	1	1	0	—	—	—	—	—
0	0	0	0	1	1	0	—	0	0	0	—
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
0	0	0	0	2	2	0	—	0	0	0	—
0	0	0	0	1	1	0	—	0	0	0	—
0	0	0	0	2	0	2	3	1	1	0	0
0	—	—	—	—	—	—	—	—	—	—	—
0	0	0	0	0	0	0	—	0	0	0	—
0	—	—	—	0	—	—	—	0	—	—	—
0	0	0	0	3	3	0	1	0	0	0	0
—	—	—	—	0	0	0	—	0	0	0	—
50	0	0	50	4	4	0	0	0	0	0	—
0	0	0	0	0	0	0	—	0	0	0	—
0	—	—	—	1	0	0	1	0	—	—	0
—	—	—	—	2	2	0	2	5	5	0	—
0	—	—	—	1	—	—	0	0	—	—	0
0	0	0	0	0	0	0	—	0	0	0	—
0	—	—	—	0	—	—	0	0	—	—	0
—	—	—	—	5	5	0	410	0	0	0	—
0	—	—	—	5	5	0	—	0	0	0	—
0	0	0	0	6	6	0	—	1	1	0	0
—	—	—	—	1	—	—	—	—	—	—	—
0	—	—	—	7	7	—	—	1	1	—	—
0	—	—	—	1	1	—	—	1	1	—	—
17	17	—	—	0	—	—	0	0	—	—	—
—	—	—	—	0	0	0	—	3	3	0	—
—	—	—	—	1	—	—	—	—	—	—	—
—	—	—	—	10	10	—	0	22	22	—	0
—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	2	2	0	—	0	—	—	—
—	—	—	—	7	4	0	3	0	0	0	0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
0	0	0	0	3	3	0	—	1	1	0	—
0	0	0	0	0	0	0	—	—	—	—	—
—	—	—	—	1	—	—	0	1	—	—	—
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	—	—	—	0	—	—	0	0	—	—	0
10	0	0	10	7	0	7	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	3	3	0	—	0	0	0	—
0	0	0	0	1	1	0	—	1	1	0	—
2	0	0	2	3	0	3	—	1	1	0	—
0	0	0	0	0	0	0	0	0	0	0	0
—	—	—	—	1	1	0	—	—	—	—	—
0	0	0	0	8	8	0	0	1	1	0	0

(k) Includes Terminal Stations.
(l) Includes Allen Oil Corp.
(m) They are jobbers.
(n) Includes Valley Oil Div., TM Oil Div., and McLoon Oil Div.

(o) Includes Martin Oil of Indiana and Martin's 4-Min. Auto Saloon, Inc.
(p) Majority of business not gasoline.
(q) Includes, Sello, Reelo, Hi-Val, Big-Bi and Lo-Lo.
(r) Majik Markets operates a total of 485 C-stores with gasoline.

How Oil Companies Handle

INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS	TOTAL BRANDED RETAIL OUTLETS†	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	BRANDED SERVICE STATIONS					
			Total true branded service stations	Supplied directly	Supplied through jobbers and commission agents	Lessee/ dealer operated	Salary operated	Commission operated
Curtis Parker Oil Co.	**36**	**1**	**21**	**19**	**—**	**21**	**0**	**0**
Peavey Oil Co.	**6**	**1**	**6**	**6**	**0**	**3**	**3**	**0**
Pester Corp.	**214(s)**	**10**	**214**	**214**	**0**	**0**	**214**	**0**
Petroleum Products Corp.	6	1	—	—	—	—	—	—
Petroleum Sales & Service	30	1	30	30	0	30	0	0
Pettway Oil Co.	41	3	13	0	13	13	0	0
Phillips Fuel Co.	**87**	**1**	**—**	**—**	**—**	**—**	**—**	**—**
Piasa Motor Fuels, Inc.	**15**	**2**	**15**	**15**	**0**	**12**	**3**	**0**
Pilot Oil Corp. (xxx)	**94**	**8**	**94**	**94**	**—**	**—**	**94**	**—**
Port Oil, Inc.	55	2	55	55	0	0	55	0
Powerine Oil Co.	33	2	33	33	—	0	33	0
Power Test Corp.	460	5	460	460	0	326	134	0
Premium Petroleum Products, Inc. (xxx)	**50**	**1**	**50**	**50**	**—**	**49**	**—**	**1**
Pride of Texas Distributing Co., Inc. (xxx)	**29**	**1**	**29**	**29**	**—**	**27**	**2**	**—**
Pride Oil Co., Inc. (Miss.)	**23**	**2**	**23**	**23**	**0**	**0**	**1**	**22**
Pride Oil Co., Inc. (Tenn.)	15	1	15	15	—	—	15	—
Private Brand Services, Inc.	2	1	2	—	—	0	2	—
Publix Oil Co., Inc.	210(u)	6	45	45	0	15	0	30
W. H. Pugh Oil Co. (xxx)	**17**	**1**	**17**	**13**	**4**	**9**	**8**	**—**
Quaker State Oil Refining Corp.	**263**	**4**	**250**	**38**	**212**	**250**	**0**	**0**
Quality Oil Co. (xxx)	**164**	**2**	**161**	**161**	**—**	**96**	**14**	**17**
Quarles Petroleum, Inc.	307	1	17	17	0	17	0	0
Racetrac Petroleum, Inc.	140	13	140	140	0	40	100	0
Red Head Oil Co. (xxx)	27	1	2	27	—	3	6	18
Reinhardt Oil Corp.	**35(v)**	**1**	**7**	**7**	**0**	**5**	**2**	**0**
Reynolds Industries	**14(w)**	**2**	**14**	**14**	**0**	**9**	**5**	**0**
Rock Island Refining Corp.	**254(x)**	**3**	**254**	**254**	**0**	**0**	**254**	**0**
Rocket Oil Co.	1	1	1	1	0	1	0	0
Romaco, Inc.	312(y)	5	268	268	0	33	137	98
Ryan DeWitt Corp.	23(z)	1	6	6	0	0	6	0
Santee Oil Co., Inc.	**59**	**1**	**15**	**15**	**0**	**12**	**3**	**0**
Save-X, USA, Inc.	**42(AA)**	**2**	**42**	**42**	**0**	**0**	**12**	**30**
Self-Service Oil Co.	**20**	**NA**	**—**	**—**	**—**	**—**	**—**	**—**
Shelby Petroleum Corp.	20	2	20	20	0	0	20	0
Shotmeyer Bros. Petroleum Corp.	65	1	63	63	0	32	0	31
Shotmeyer Oil Co. (xxx)	41	3	41	41	—	3	—	38
The SICO Co.	**143**	**2**	**—**	**—**	**—**	**—**	**—**	**—**
Sigmor Corp.								
Simmons Oil Corp.	**0**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Simon Oil Co., Inc.	90	1	90	90	0	81	9	0
Smith-Shafer Oil Co.	9	3	9	9	0	0	7	2
M. Spiegel & Sons Oil Corp.	25(BB)	1	25	25	0	25	0	0
Standard Cycle & Auto Supply	**52**	**1**	**—**	**—**	**—**	**—**	**—**	**—**
Star Oil Co.	**49**	**1**	**49**	**32**	**17**	**21**	**2**	**—**
Star Service & Petroleum Co.	**183**	**19**	**183**	**183**	**0**	**0**	**183**	**0**
Steuart Petroleum Co.	6	1	6	6	—	—	—	—
Suburban Propane Gas Co.	145	5	145	145	0	7	60	5
Sunny Service Stations, Inc.	10	1	10	10	0	2	8	0
Sunshine Jr. Stores, Inc. (xxx)	**307**	**5.**	**307**	**57**	**250**	**—**	**—**	**—**
Tanner Oil Co.	**97(CC)**	**3**	**86**	**86**	**0**	**1**	**84**	**1**
Taylor Oil Co.	**57**	**2**	**57**	**57**	**0**	**0**	**0**	**57**
Texas Star, Inc.	8(DD)	1	0	0	0	0	0	0
Thornhill Oil Co., Inc.	20	1	10	10	0	5	5	0
Thornton Oil Corp.	87	15	87	—	—	0	87	0
Time Oil Co.	**213**	**5**	**—**	**—**	**—**	**—**	**—**	**—**
Tooley Oil Co.	**11**	**1**	**10**	**10**	**0**	**1**	**9**	**0**
Total Petroleum, Inc.	**1,797**	**21**	**1,797**	**450**	**1,347**	**1,347**	**450**	**0**
Transit Oil Co.	14	2	—	—	—	—	—	—
Travelers Petroleum, Inc.	65	3	5	5	0	0	5	0
Trenton Oil Co.	50	1	50	50	0	50	0	0
Truax, Inc.	**75**	**2**	**75**	**75**	**0**	**34**	**38**	**3**
United Refining Co.	**363(EE)**	**3**	**363**	**363**	**0**	**49**	**314**	**0**
Wake Up Oil Co., Inc.	**43**	**1**	**43**	**43**	**0**	**1**	**42**	**0**
Warelubco, Inc.	91	6	91	91	0	1	90	0
Webaco Oil Co.	26	2	—	—	—	—	—	—
Webster Oil Co.	18	1	18	18	0	10	8	0
Wesson, Inc.	**15**	**1**	**15**	**15**	**0**	**3**	**9**	**3**
Western Marketing, Inc.	**53(FF)**	**2**	**53**	**50**	**0**	**2**	**47**	**1**
Whale Oil Corp.	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Whale Oil Corp. of New Jersey	—	—	—	—	—	—	—	—
Wickland Oil Co.	85(GG)	3	85	85	0	85	0	0
A. T. Williams Oil Co.	65	2	—	—	—	—	—	—
J. H. Williams Oil Co., Inc.	**84**	**1**	**73**	**68**	**5**	**68**	**4**	**1**
Wilson of Wallingford, Inc.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Zephyr, Inc.	**65**	**2**	**65**	**45**	**20**	**15**	**50**	**0**
World Oil Co.	93	1	93	93	0	0	93	0
Young Oil, Inc.	9	1	3	3	0	—	—	—

(s) Includes Pester Marketing Northern and Pester Marketing Southern.
(t) Includes Aero Oil Co.
(u) Includes Dalton Oil, Scotland and Hay Oil.
(v) Includes Corner Food Stores, Inc.

(w) Includes Port Oil Co.
(x) Includes Tulsa Oil Corp., Supre Fuels Co., Wake Up Oil Co., United Oil Service, Colonial Imperial, and Colonial Oil Co.
(y) Includes Thrifty Petroleum and Masail, Inc.

Product Distribution (cont'd.)

			BRANDED JOBBERS				COMMISSION AGENTS			
				NUMBER SELLING . . .				NUMBER SELLING . . .		
100% full service	100% self service	Service and self service	Total	Gasoline only	Fuel Oil only	Gasoline/ fuel oil	Total	Gasoline only	Fuel oil only	Gasoline/ fuel oil
13	3	5	1	0	0	1	2	0	0	2
6	0	0	1	0	0	1	0	0	0	0
0	212	2	0	0	0	0	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
12	2	16	0	0	0	0	1	1	0	0
2	0	11	NA	NA	NA	NA	1	—	—	—
—	—	—	—	—	—	—	—	—	—	—
0	0	15	NA	NA	NA	NA	NA	NA	NA	NA
4	90	—	0	—	—	—	—	—	—	—
6	40	10	0	0	0	0	0	0	0	0
0	33	0	0	0	0	0	0	0	0	0
428	20	12	0	0	0	0	0	0	0	0
50	—	—	0	—	—	—	0	—	—	—
6	12	11	0	—	—	—	0	—	—	—
0	22	1	0	0	0	0	0	0	0	0
8	8	7	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	0	0	0	0
10	0	35	9	1	2	6	—	—	—	—
11	6	—	—	—	—	—	2	—	—	2
239	11	0	43	0	0	43	0	0	0	0
23	32	109	0	—	—	—	0	—	—	—
0	0	17	—	—	—	—	—	—	—	—
38	102	0	0	0	0	0	0	0	0	0
4	23	0	2	2	—	—	0	—	—	—
7	0	0	0	0	0	0	0	0	0	0
13	1	0	0	0	0	0	0	0	0	0
92	22	140	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0
8	260	0	0	0	0	0	0	0	0	0
0	0	6	2	0	0	2	2	0	0	2
2	3	10	0	0	0	0	0	0	0	0
6	34	2	0	0	0	0	0	0	0	0
—	20	—	—	—	—	—	—	—	—	—
20	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0
41	—	—	0	—	0	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
79	11	0	0	0	0	0	0	0	0	0
1	6	2	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
30	5	14	2	0	0	2	0	0	0	0
42	71	70	0	0	0	0	0	0	0	0
—	—	—	0	0	0	0	0	0	0	0
1	143	1	73	73	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0
—	307	—	9	—	—	—	29	—	—	29
8	7	71	0	0	0	0	0	0	0	0
0	57	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
1	2	2	0	0	0	0	5	4	0	1
87	0	0	NA	NA	NA	NA	NA	NA	NA	NA
—	—	—	—	—	—	—	—	—	—	—
0	10	0	0	0	0	0	0	0	0	0
47	650	1,100	414	0	0	414	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
0	5	0	—	—	—	—	—	—	—	—
50	0	0	0	0	0	0	0	0	0	0
72	3	0	—	—	—	—	—	—	—	—
313	—	—	0	0	0	0	7	—	—	—
13	0	29	0	0	0	0	0	0	0	0
2	7	82	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
0	3	15	0	0	0	0	0	0	0	0
6	8	1	0	0	0	0	0	0	0	0
2	49	2	3	0	0	3	0	0	0	0
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
1	84	0	0	0	0	0	3	3	0	0
0	60	5	—	—	—	—	—	—	—	—
39	2	32	0	0	0	0	1	0	0	1
0	0	0	0	0	0	0	0	0	0	0
0	35	30	5	0	0	5	3	0	0	3
0	93	0	NA	All	0	0	0	0	0	0
—	—	—	0	0	0	0	0	0	0	0

(z) Includes Albion Oil Co. and L.W. Stroup Corp.
(AA) Includes Serve-N-Save, Inc.
(BB) Includes SOS Oil Corp.
(CC) Includes Rich of Ohio, Rich of West Virginia, Tanco, Inc., and Rich Oil Corp.

(DD) Includes Texas Star Oil Co.-Mini-Mart.
(EE) Includes United Refining Co. of Pennsylvania.
(FF) Includes Wes T Go and Westico Truck Stops.
(GG) Includes Regal Stations, Inc.

Product Distribution (cont'd.)

BULK PLANTS				TERMINALS				
	COMPANY OPERATED				COMPANY OPERATED			
Total	Salary operated	Commission operated	Jobber operated bulk plants	Total	Salary operated	Commission operated	Jobber operated terminals	INDEPENDENT OIL COMPANIES AND SELECTED OIL JOBBERS
3	1	2	—	—	—	—	—	**Curtis Parker Oil Co.**
2	2	0	—	2	1	1	0	**Peavey Oil Co.**
0	0	0	0	0	0	0	0	**Pester Corp.**
—	—	—	—	4	4	—	—	Petroleum Products Corp.
0	0	0	0	0	0	0	0	Petroleum Sales & Service
1	1	0	NA	NA	NA	NA	NA	Pettway Oil Co.
2	2	0	—	—	—	—	—	**Phillips Fuel Co.**
3	1	2	—	0	0	0	0	**Piasa Motor Fuels, Inc.**
0	—	—	—	—	—	—	—	**Pilot Oil Corp. (xxx)**
0	0	0	—	0	0	0	—	Port Oil, Inc.
0	0	0	0	2	2	0	0	Powerine Oil Co.
2	2	0	—	0	0	0	—	Power Test Corp.
0	—	—	—	0	—	—	—	**Premium Petroleum Products, Inc. (xxx)**
0	—	—	—	0	—	—	—	**Pride of Texas Distributing Co., Inc. (xxx)**
0	0	0	0	0	0	0	0	**Pride Oil Co., Inc. (Miss.)**
0	0	0	0	0	0	0	0	Pride Oil Co., Inc. (Tenn.)
0	0	0	0	0	0	0	0	Private Brand Services, Inc.
7	7	0	—	3	3	—	—	Publix Oil Co., Inc.
2	—	2	—	1	1	—	—	**W. H. Pugh Oil Co. (xxx)**
1	1	0	7	3	3	0	0	**Quaker State Oil Refining Corp.**
7	7	—	0	0	—	—	0	**Quality Oil Corp.**
8	8	0	—	2	2	0	—	Quarles Petroleum, Inc.
0	0	0	0	0	0	0	0	Racetrac Petroleum, Inc.
0	—	—	0	0	—	—	0	Red Head Oil Co. (xxx)
4	4	0	0	0	0	0	—	**Reinhardt Oil Corp.**
0	0	0	0	0	0	0	0	**Reynolds Industries**
0	0	0	0	1	1	0	0	**Rock Island Refining Corp.**
0	0	0	0	0	0	0	0	Rocket Oil Co.
4	4	0	NA	17	17	0	—	Romaco, Inc.
6	6	0	—	0	0	0	—	Ryan DeWitt Corp.
4	4	0	0	0	0	0	0	**Santee Oil Co., Inc.**
0	0	0	0	0	0	0	0	**Save-X, USA, Inc.**
—	—	—	—	—	—	—	—	**Self-Service Oil Co.**
1	1	0	—	0	0	0	—	Shelby Petroleum Corp.
1	1	0	0	0	0	0	0	Shotmeyer Bros. Petroleum Corp.
0	—	—	0	4	4	—	0	Shotmeyer Oil Co. (xxx)
9	9	0	3	1	1	0	0	**The SICO Co.**
—	—	—	—	2	2	0	0	**Simmons Oil Corp.**
0	0	0	—	0	0	0	—	Simon Oil Co., Inc.
1	1	0	0	0	0	0	0	Smith-Snafer Oil Co.
3	3	0	0	0	0	0	0	M. Spiegel & Sons Oil Corp.
—	—	—	—	—	—	—	—	**Standard Cycle & Auto Supply**
1	1	0	2	0	0	0	—	**Star Oil Co.**
0	0	0	0	0	0	0	0	**Star Service & Petroleum Co.**
1	1	0	—	4	4	0	—	Steuart Petroleum Co.
0	NA	NA	0	2	2	0	—	Suburban Propane Gas Co.
0	0	0	0	0	0	0	0	Sunny Service Stations, Inc.
0	—	—	0	0	—	—	—	**Sunshine Jr. Stores, Inc. (xxx)**
0	0	0	0	1	1	0	0	**Tanner Oil Co.**
0	0	0	0	2	2	0	0	**Taylor Oil Co.**
0	0	0	0	0	0	0	0	Texas Star, Inc.
1	1	0	0	0	0	0	0	Thornhill Oil Co., Inc.
0	0	0	—	0	0	0	—	Thornton Oil Corp.
—	—	—	—	8	8	0	—	**Time Oil Co.**
0	0	0	0	0	0	0	0	**Tooley Oil Co.**
0	0	0	0	8	8	0	NA	**Total Petroleum, Inc.**
0	0	0	—	0	0	0	—	Transit Oil Co.
—	—	—	—	—	—	—	—	Travelers Petroleum, Inc.
0	0	0	0	0	0	0	0	Trenton Oil Co.
8	7	—	1	—	—	—	—	**Truax, Inc.**
7	0	7	—	3	—	—	0	**United Refining Co.**
0	0	0	—	0	0	0	0	**Wake Up Oil Co., Inc.**
1	1	0	—	—	—	—	—	Warelubco, Inc.
0	—	—	—	—	—	—	—	Webaco Oil Co.
2	2	0	—	0	0	0	—	Webster Oil Co.
2	2	0	0	0	0	0	—	**Wesson, Inc.**
2	1	1	0	0	0	0	—	**Western Marketing, Inc.**
8	—	—	8	—	—	—	—	**Whale Oil. Corp.**
3	—	—	3	—	—	—	—	Whale Oil Corp. of New Jersey
0	0	0	0	7	7	0	0	Wickland Oil Co.
4	4	0	—	—	—	—	—	A. T. Williams Oil Co.
4	3	1	0	0	0	0	0	**J. H. Williams Oil Co., Inc.**
2	2	0	0	0	0	0	0	**Wilson of Wallingford, Inc.**
3	0	3	—	2	2	0	0	**Zephyr, Inc.**
—	—	—	—	—	—	—	—	World Oil Co.
0	0	0	0	0	0	0	0	Young Oil, Inc.

Source: NPN questionnaires, Spring, 1983.

Branded Retail Outlets

Company	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	New England						Middle Atlantic		
			Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	N.J.	Pa.
Agway Petroleum Corp. (xxx)	283	9	8	8	10	25	1	3	132	23	73
American Patrofina, Inc.	4,201	20	—	—	—	—	—	—	—	—	—
Amoco Oil Co.	17,765	44	1	1	—	290	20	191	667	481	838
Amos Post	33	1	—	—	—	—	—	—	33	—	—
Armour Oil Co.	75	7	—	—	—	—	—	—	—	—	—
Ashland Petroleum Co.	194	8	—	—	—	—	—	—	9	—	4
Atlantic Richfield Co.	5,260	26	—	15	34	231	72	172	403	209	1,445
Atlas Oil Co. of Utica (xxx)	7	1	—	—	—	—	—	—	7	—	—
The Augsbury Corp.	133	2	—	—	22	—	—	—	111	—	—
Automatic Comfort Corp.	53	1	—	—	—	—	—	53	—	—	—
Bagwell Oil Co.	18	2	—	—	—	—	—	—	—	—	—
Best Oil, Inc.	3	1	—	—	—	—	—	—	—	—	3
Bonded Oil Co. (xxx)	247	4	—	—	—	—	—	—	—	—	—
Bray Terminals, Inc. (xxx)	54	1	—	—	—	—	—	—	54	—	—
Browning Oil Co.	17	1	—	—	—	—	—	—	—	—	—
By-Lo Oil Co. (xxx)	15	1	—	—	—	—	—	—	—	—	—
Campbell Oil Co.	54	1	—	—	—	—	—	—	—	—	—
Cel Oil Products Corp.	16	1	—	—	—	—	—	—	—	—	—
Cenex	1,117	14	—	—	—	—	—	—	—	—	—
Certified Oil Co.	210	3	—	—	—	—	—	—	—	—	—
Charter Management, Inc.	10	2	—	—	—	—	—	—	—	—	—
Charter Oil Co.	320	6	—	—	—	—	—	—	—	—	—
Cheker Oil Co.	381	16	—	—	—	—	—	—	—	—	10
Chevron, U.S.A., Inc.	12,403	41	92	34	29	69	13	208	437	238	196
Citadel Corp. (xxx)	11	3	—	—	—	—	—	—	—	—	—
Cities Service Co.	4,727	32	114	168	67	256	19	78	271	348	110
Coen Oil Co.	200	1	—	—	—	—	—	—	—	—	—
Colonial Industries, Inc.	71	3	—	—	—	—	—	—	—	—	—
Como Oil Co. (xxx)	30	1	—	—	—	—	—	—	—	—	—
Conna Corp.	285	11	—	8	11	—	—	3	13	—	—
Conoco, Inc.	4,702	28	—	—	—	—	—	—	—	—	—
Consumers Gasoline Stations	34	2	—	—	—	—	—	—	—	—	—
Consumers Oil Corp.	16	2	—	—	—	—	—	—	—	14	2
Consumers Petroleum	20	1	—	—	—	—	—	20	—	—	—
Crown Central Petroleum Corp.	NA	8	—	—	—	—	—	—	(x)	(x)	(x)
Crystal Flash Petroleum Corp.	32	2	—	—	—	—	—	—	—	—	—
Crystal U.S.A. Oil Co.	116	9	—	—	—	—	—	—	—	—	—
C.S.C. Oil Corp.	22	2	—	—	—	—	—	—	—	—	—
K.E. David Ltd.	8	1	—	—	—	—	—	—	—	—	8
Dead River Co. (xxx)	135	2	122	13	—	—	—	—	—	—	—
DeBlois Oil Co. (xxx)	43	2	—	—	—	8	35	—	—	—	—
Delta Marketing Co.	337	12	—	—	—	—	—	—	—	—	—
Derby Refining Co.	520	12	—	—	—	—	—	—	—	—	—
Diamond Shamrock Corp.	1,647	24	—	—	—	—	—	—	4	—	2
Dixie Oil Co. (xxx)	97	3	—	—	—	—	—	—	—	—	—
Dominion Oil Co.	26	1	—	—	—	—	—	—	—	—	—
Drake's Refinery Stations, Inc.	12	1	—	—	—	—	—	—	—	—	—
East Coast Oil Corp.	32	1	—	—	—	—	—	—	—	—	—
Elm City Filling Stations, Inc. (xxx)	60	1	—	—	—	—	—	60	—	—	—
E.M. Bailey Dist. Co.	86	1	—	—	—	—	—	—	—	—	—
Englefield Oil Co.	77	2	—	—	—	—	—	—	—	—	—
Exxon Co., U.S.A.	20,119	41	307	99	105	342	48	198	935	854	1,148
Farm Stores, Inc. (xxx)	60	1	—	—	—	—	—	—	—	—	—
FCX, Inc.	98	2	—	—	—	—	—	—	—	—	—
Fireline Petroleum	450	10	28	27	—	114	41	53	58	24	4
Fisca Oil Co., Inc.	103	22	—	—	—	—	1	3	—	4	10
Don Foster Oil Co.	41	1	—	—	—	—	—	—	—	—	—
Gas-N-Go, Inc.	1	1	—	—	—	—	—	—	—	—	—
Gem Petroleum—Shop & Go	284	2	—	—	—	—	—	—	—	—	—
Getty Refining & Marketing Co.	4,494	28	99	79	71	253	68	166	551	470	205
Golden Imperial	45	1	—	—	—	—	—	—	—	—	—
Golub Corp.	14	2	—	—	—	1	—	—	13	—	—
Gresham Petroleum Co.	16	1	—	—	—	—	—	—	—	—	—
Growmark, Inc.	260	3	—	—	—	—	—	—	—	—	—
Gulf Oil Corp.	14,598	28	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)
Higgans Oil Co. (xxx)	22	1	—	—	—	—	—	—	—	—	—
Highland Petroleum	12	6	—	—	—	—	—	—	—	—	—
Highway Oil, Inc.	218	25	—	2	2	—	—	—	23	—	26
Angus J. Hines, Inc.	51	1	—	—	—	—	—	—	—	—	—
Hop-In Food Stores, Inc.	150	3	—	—	—	—	—	—	—	—	—
Hudson Oil Co.	265	NA	—	—	—	—	—	—	—	—	—
Hughes Oil Co.	120	1	—	—	—	—	—	—	—	—	—
Hull Oil Co.	22	2	—	—	—	—	—	—	—	—	—
Johnson Products (xxx)	95	6	45	20	5	10	5	—	10	—	—

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*Total branded retail outlets include garages, motels, C-stores, and service stations. By U.S. Census Bureau definition, only establishments generating 50% or more of their income from the sale of petroleum products and services are service stations.

†Total number of states where gasoline is branded includes the District of Columbia.

in the United States

South Atlantic									East North Central					East South Central			
Del.	**Md.**	**D.C.**	**Va.**	**W.Va.**	**N.C.**	**S.C.**	**Ga.**	**Fla.**	**Ohio**	**Ind.**	**Ill.**	**Mich.**	**Wis.**	**Ky.**	**Tenn.**	**Ala**	**Miss.**
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	151	221	612	551	—	—	1	—	—	1	227	126	37
34	392	50	647	—	1,183	523	829	778	504	783	1,353	1,117	636	16	824	830	380
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	3	—	—	—	—	—	1	—	—	—	—	—	—	—	—
—	—	—	3	25	—	—	—	—	53	2	2	—	—	96	—	—	—
58	125	4	96	30	2	—	—	—	34	26	244	24	5	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	13	—	—	—	—	165	38	—	—	31	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	15	—	—	—	—	—
—	—	—	—	—	—	—	—	—	54	—	—	—	—	—	—	—	—
—	—	—	—	—	—	16	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	164	—	—	—	—
—	—	—	—	13	—	—	—	—	192	—	—	—	—	5	—	—	—
—	—	—	—	—	—	—	9	1	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	2	55	—	—	—	—	—	—	—	1	63
—	—	—	—	—	—	—	4	44	8	67	134	49	8	9	3	2	5
23	50	1	21	97	59	117	1,169	1,174	4	7	—	—	—	1,173	126	1,132	661
—	2	8	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	55	1	194	9	315	63	179	602	42	164	238	103	235	33	129	244	98
—	—	—	—	—	—	—	—	—	200	—	—	—	—	—	—	—	—
—	—	—	—	—	9	31	31	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—
—	—	—	—	—	15	—	—	14	—	27	29	—	—	144	19	—	—
—	—	—	—	—	—	—	—	1	—	42	102	22	134	20	—	15	50
—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	28	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	(x)	—	(x)	—	(x)	(x)	(x)	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	16	—	16	—	—	—	—	—
—	—	—	—	—	—	—	2	25	—	—	—	—	—	1	3	56	5
—	—	—	—	—	—	—	—	—	13	—	—	—	—	9	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	1	10	10	—	12	—	—	—	44	132	29	18
—	—	—	—	—	—	—	—	—	—	—	31	—	—	4	2	—	—
—	—	—	13	—	2	4	2	5	—	—	—	—	—	1	5	—	—
—	—	—	—	—	—	—	65	30	—	—	—	—	—	—	—	2	—
—	—	—	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	12	—	—	—	—	—
—	—	—	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	86	—	—	—
—	—	—	—	8	—	—	—	—	69	—	—	—	—	—	—	—	—
76	517	61	1,113	562	1,999	1,039	703	569	157	—	—	—	—	173	986	433	259
—	—	—	—	—	—	—	—	60	—	—	—	—	—	—	—	—	—
—	—	—	—	—	84	14	—	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	97	—	—	—	—	—	—	—	—	—
—	5	—	13	—	—	—	4	—	6	1	5	9	2	1	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	41	—	—	—	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	32	252	—	—	—	—	—	—	—	—	—
41	51	—	1	—	—	—	—	—	—	—	90	6	145	—	—	—	—
—	—	—	—	—	—	—	—	—	—	45	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16
—	—	—	—	—	—	—	—	—	—	—	122	—	23	—	—	—	—
(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	—	—	(x)	—	(x)	(x)	(x)	(x)
—	—	—	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—
—	5	—	—	5	—	—	2	30	35	8	1	3	—	7	9	2	2
—	—	—	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	76	—	49	—	—	—	—	—	—	—	—	—	25	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	120	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	20	—	—	—	—	—	—	—	2	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(xxx) Latest data available. Company either did not respond to the 1983 questionnaire or did not answer all of the questions fully.

(x) Company markets in these states but refuses to disclose the number of outlets involved.

Source: NPN questionnaires and 1982 Factbook.

Branded Retail Outlets (cont'd.)

Company	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	New England						Middle Atlantic		
			Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	N.J.	Pa.
J & L Oil Co.	81	5	—	—	—	—	—	—	—	—	—
Kellet Oil Co.	20	3	—	—	—	—	—	—	—	—	—
Kerr-McGee Refining Corp.	1,814	18	—	—	—	—	—	—	—	—	—
Key Energy Enterprises	100	3	—	—	—	—	—	—	—	—	—
Kimber-Allen Petroleum Corp.	180	1	—	—	—	—	—	—	—	180	—
Kingston Oil Supply Corp.	13	1	—	—	—	—	—	—	13	—	—
Lake Shore Oil Co. (xxx)	30	1	—	—	—	—	—	—	—	—	—
Land O Lakes	393	6	—	—	—	—	—	—	—	—	—
Lido Co. of New England	97	3	49	26	—	22	—	—	—	—	—
Little Oil Co.	43	1	—	—	—	—	—	—	—	—	—
Main Bros. Oil Co., Inc. (xxx)	30	1	—	—	—	—	—	—	30	—	—
Marathon Oil Co.	2,209	6	—	—	—	—	—	—	—	—	—
Marshall Oil Co.	50	1	—	—	—	—	—	—	—	—	—
Martin Oil Marketing, Ltd.	132	11	—	—	—	—	—	—	—	—	3
McDowell Oil Service, Inc.	28	1	—	—	—	—	—	—	—	—	28
Merit Oil Corp.	NA	11	—	(x)	—	(x)	(x)	(x)	(x)	(x)	(x)
Mico Oil Co., Inc.	28	15	—	—	—	—	—	—	—	1	—
Mid-States Petroleum, Inc.	72	3	—	—	—	—	—	—	—	—	—
Miller Enterprises, Inc. (xxx)	90	1	—	—	—	—	—	—	—	—	—
Miller Oil Co., Inc. (Norfolk)	16	1	—	—	—	—	—	—	—	—	—
Miller Oil Co. (Toledo)	4	1	—	—	—	—	—	—	—	—	—
Mobil Oil Corp.	16,216	44	275	167	200	678	99	513	2,048	472	1,162
Monarch Oil & Supply Co. (xxx)	25	1	—	—	—	—	—	—	—	—	—
Munford, Inc.	485	13	—	—	—	—	—	—	—	—	—
Murphy Oil Corp.	717	14	—	—	—	—	—	—	—	—	—
Musket Corp.	120	9	—	—	—	—	—	—	—	—	—
National Convenience Stores (xxx)	131	39	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)
National Oil & Gas, Inc.	60	2	—	—	—	—	—	—	—	—	—
R.B. Newman Fuel Corp.	14	1	—	—	—	—	—	—	14	—	—
Osceola Refining Co.	13	1	—	—	—	—	—	—	—	—	—
Parker Oil Co. Inc.	255	2	—	—	—	—	—	—	—	—	—
Pester Corp.	214	10	—	—	—	—	—	—	—	—	—
Petroleum Products Corp.	6	1	—	—	—	—	—	—	—	—	6
Petroleum Sales & Service	30	1	—	—	—	—	—	—	30	—	—
Pettway Oil Co.	42	2	—	—	—	—	—	—	—	—	—
Phillips Fuel Co.	87	1	—	—	—	—	—	—	—	87	—
Phillips Petroleum Co.	12,035	38	—	—	—	—	—	—	—	—	146
Piasa Motor Fuels, Inc.	15	2	—	—	—	—	—	—	—	—	—
Pilot Oil Corp. (xxx)	94	8	—	—	—	—	—	—	—	—	—
Port Oil, Inc.	55	2	—	—	—	—	—	—	—	—	—
Power Test Corp.	460	5	—	—	—	26	—	36	339	57	2
Premium Petroleum Products, Inc. (xxx)	50	1	—	—	—	—	—	—	50	—	—
Pride Oil Co., Inc. (Miss.)	23	2	—	—	—	—	—	—	—	—	—
Pride Oil Co., Inc. (Tenn.)	15	1	—	—	—	—	—	—	—	—	—
Private Brand Services	2	1	—	—	—	—	—	—	—	—	—
Publix Oil Co., Inc.	210	6	—	—	—	—	—	—	—	—	—
Quaker State Oil Ref. Corp.	263	4	—	—	—	—	—	—	42	—	122
Quality Oil Co. (xxx)	164	4	—	—	—	—	—	—	—	—	—
Quarles Petroleum, Inc.	307	1	—	—	—	—	—	—	—	—	—
Racetrac Petroleum, Inc.	140	13	—	—	—	—	—	—	—	—	—
Red Hed Oil Co. (xxx)	27	1	—	—	—	—	—	—	—	—	—
Reinhardt Oil Corp.	35	1	—	—	—	—	—	—	35	—	—
Reynolds Industries	14	2	1	—	—	13	—	—	—	—	—
Rock Island Refining Corp.	254	3	—	—	—	—	—	—	—	—	—
Rocket Oil Co.	1	1	—	—	—	—	—	—	—	—	—
Romaco, Inc.	312	5	—	—	—	—	—	—	—	—	—
Ryan DeWitt Corp.	23	1	—	—	—	—	—	—	23	—	—
Santee Oil Co., Inc.	59	1	—	—	—	—	—	—	—	—	—
Save-X, USA, Inc.	42	2	—	—	—	—	—	—	—	—	—
Self Service Oil Co. (xxx)	19	4	—	—	—	—	—	—	—	—	—
Shelby Petroleum Corp.	20	2	—	—	—	—	—	—	—	—	—
Shell Oil Co.	12,282	40	—	9	—	191	47	142	248	214	13
Shotmeyer Bros.	65	1	—	—	—	—	—	—	—	65	—
Shotmeyer Oil Corp. (xxx)	41	3	—	—	—	—	—	—	1	39	1
The Sico Co.	143	2	—	—	—	—	—	—	—	—	140
Simon Oil Co.	90	1	—	—	—	—	—	—	90	—	—
Smith-Shafer Oil Co.	9	3	—	—	—	—	—	—	—	—	—
Southeastern Petroleum Sales Corp. (xxx)	50	2	—	—	—	—	—	—	—	—	—
M. Spiegel & Sons Oil Corp.	25	1	—	—	—	—	—	—	25	—	—
Standard Cycle & Auto Supply	52	1	—	—	—	—	—	52	—	—	—
Standard Oil Co. (Sohio) (xxx)	2,220	20	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)
Star Oil Co.	49	1	—	—	—	—	—	—	—	—	—
Star Service & Petroleum Co.	186	19	—	—	—	—	—	—	—	—	—
J.D. Streett & Co. (xxx)	356	5	—	—	—	—	—	—	—	—	—

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*Total branded retail outlets include garages, motels, C-stores, and service stations. By U.S. Census Bureau definition, only establishments generating 50% or more of their income from the sale of petroleum products and services are service stations.

†Total number of states where gasoline is branded includes the District of Columbia.

South Atlantic									East North Central					East South Central			
Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Ohio	Ind.	Ill.	Mich.	Wis.	Ky.	Tenn.	Ala	Miss.
—	—	—	—	—	—	—	—	8	—	1	55	—	14	3	—	—	—
—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	3	—	—
—	—	—	—	—	—	—	—	—	—	55	120	3	103	2	34	—	16
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	40	50
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	4	79	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	680	574	288	553	13	101	—	—	—
—	—	—	—	—	50	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	7	—	33	20	46	12	3	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(x)	(x)	(x)	(x)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1	—	—	—	—	—	8	—	1	1	—	1	1	1	1
—	—	—	—	—	—	—	—	—	1	1	—	70	—	—	—	—	—
—	—	—	—	—	—	—	—	90	—	—	—	—	—	—	—	—	—
—	—	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—
67	188	2	218	26	381	57	58	326	443	244	637	977	686	38	279	19	1
—	—	—	—	—	—	—	—	—	—	25	—	—	—	—	—	—	—
—	—	—	24	—	14	45	89	83	—	—	—	2	—	5	24	30	32
—	—	—	15	—	24	9	53	158	—	—	—	32	96	6	70	106	24
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
(x)	(x)	(x)	(x)	(x)	(x)	(x)	—	—	(x)	(x)	(x)	(x)	(x)	—	—	(x)	—
—	—	—	—	—	—	—	—	—	3	57	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	13	—	—	—	—	—
—	—	—	251	—	4	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	39	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	120	—	361	33	943	451	376	567	135	491	581	142	297	156	449	329	263
—	—	—	—	—	—	—	—	—	—	—	13	—	—	—	—	—	—
—	—	—	14	1	9	—	11	10	—	—	—	—	—	10	37	2	—
—	—	—	—	—	22	33	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	20
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	—	—
—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—
—	—	—	2	—	25	38	45	—	—	—	—	—	—	6	94	—	—
—	—	—	—	50	—	—	—	—	49	—	—	—	—	—	—	—	—
—	—	—	3	—	161	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	307	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	8	—	4	5	30	23	—	—	—	—	—	—	5	40	2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	27	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	10	163	—	81	—	—	—	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	3	39	—	—	—	—	—	—	8	248	14
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	59	—	—	—	—	—	—	—	—	—	—	—
—	—	—	38	—	4	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	3	—	9	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	8	—	—
20	255	10	433	54	627	473	547	644	517	388	775	683	217	315	304	576	299
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	2	—	—	6	—	1	—	—	—	—
—	—	—	—	—	—	30	20	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(x)	(x)	(x)	(x)	(x)	(x)	—	—	—	(x)	(x)	—	(x)	—	(x)	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	49	—	—	—	—	—
—	—	—	—	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)
—	—	—	—	—	—	—	—	—	1	—	143	—	—	29	—	—	—

(xxx) Latest data available. Company either did not respond to the 1983 questionnaire or did not answer all of the questions fully.
(x) Company markets in these states but refuses to disclose the number of outlets involved.
Source: NPN questionnaires and 1982 Factbook.

Branded Retail Outlets (cont'd.)

Company	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	New England						Middle Atlantic		
			Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	N.J.	Pa.
Steuart Petroleum	6	1	—	—	—	—	—	—	—	—	—
Sun Co.	7,866	30	87	69	36	386	95	161	1,064	607	938
Sunshine Jr. Stores (xxx)	307	5	—	—	—	—	—	—	—	—	—
Tanner Oil Co.	97	3	—	—	—	—	—	—	—	—	—
Taylor Oil Co.	57	2	—	—	—	—	—	—	—	—	—
Tenneco Oil Co. (xxx)	484	17	—	—	—	1	—	3	1	—	1
Texaco, Inc.	18,692	45	193	114	90	476	108	305	857	316	1,186
Thornhill Oil Co., Inc.	20	1	—	—	—	—	—	—	—	—	—
Thornton Oil Corp.	87	15	—	—	—	—	—	4	5	—	—
Tommy Oil Co. (xxx)	36	12	—	—	—	—	—	—	5	—	7
Total Petroleum, Inc.	1,797	21	—	—	—	—	—	—	—	—	—
Transit Oil Co.	14	2	—	—	—	—	—	—	—	—	—
Travelers Petroleum, Inc.	65	3	—	—	—	—	—	—	—	—	—
Trenton Oil Co.	50	1	—	—	—	—	—	—	—	50	—
Union Oil Co. of Calif.	12,669	45	—	—	—	—	—	2	2	2	30
United Refining Co.	363	3	—	—	—	—	—	—	101	—	235
Wake Up Oil Co.	43	1	—	—	—	—	—	—	—	—	—
Warelubco, Inc.	91	6	—	—	—	—	—	—	—	—	—
Warren Equities (xxx)	275	8	4	10	—	47	35	55	26	65	23
Webaco Oil Co.	26	2	—	—	—	—	—	—	13	—	—
Wesson, Inc.	15	1	—	—	—	—	—	15	—	—	—
A.T. Williams Oil	65	2	—	—	—	—	—	—	—	—	—
J.H. Williams Oil Co., Inc.	84	1	—	—	—	—	—	—	—	—	—
Young Oil, Inc.	9	1	—	—	—	—	—	—	—	—	—
Zephyr, Inc.	65	2	—	—	—	—	—	—	—	—	—

Company	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	West North Central						
			Minn.	Iowa	Mo.	N.D.	S.D.	Neb.	Kan.
Ada Resources (xxx)	207	1	—	—	—	—	—	—	—
American Petrofina, Inc.	4,201	20	—	18	167	—	1	21	156
Amoco Oil Co.	17,765	44	640	406	560	149	260	215	306
Arkla Chemical Corp.	4	2	—	—	—	—	—	—	—
Armour Oil Co.	75	7	—	—	—	—	—	—	—
Asamera Oil, Inc. U.S.	93	10	—	—	—	—	—	1	—
Atlantic Richfield Co.	5,260	26	—	—	—	—	—	—	—
Beacon Oil Co.	292	2	—	—	—	—	—	—	—
Brennan Petroleum	3	1	—	—	—	—	—	—	—
Cenex	1,177	14	250	100	—	172	107	65	1
Charter Oil Co.	320	6	—	—	—	—	—	—	—
Cheker Oil Co.	381	16	—	8	25	—	—	3	—
Chevron U.S.A.	12,403	41	—	—	—	—	—	1	—
Cities Service Co.	4,727	32	7	—	5	—	—	—	—
Conna Corp.	285	11	—	1	—	—	—	—	—
Conoco, Inc.	4.702	28	148	235	274	52	38	228	203
Cook & Cooley, Inc.	100	1	—	—	—	—	—	—	—
Crystal U.S.A. Oil Co.	116	9	—	—	—	—	—	—	—
Delta Marketing Co.	337	12	—	—	—	—	—	—	—
Derby Refining Co.	520	12	9	110	108	—	3	45	169
Diamond Shamrock Corp.	1,847	24	—	—	1	—	—	—	22
Exxon Co. U.S.A.	20,119	41	—	—	—	63	3	3	—
Farmland Industries, Inc. (xxx)	927	11	112	184	51	100	40	160	211
Fisca Oil Co., Inc.	103	22	1	2	5	—	1	3	2
Franko Oil Co.	92	3	—	—	—	—	—	—	—
Flying J., Inc. (xxx)	86	9	—	—	—	7	—	—	—
Gasco Gasoline	120	1	—	—	—	—	—	—	—
General Oil Co.	51	2	—	—	3	—	—	—	—

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*Total branded retail outlets include garages, motels, C-stores, and service stations. By U.S. Census Bureau definition, only establishments generating 50% or more of their income from the sale of petroleum products and services are service stations.

†Total number of states where gasoline is branded includes the District of Columbia.

South Atlantic									East North Central					East South Central			
Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Ohio	Ind.	Ill.	Mich.	Wis.	Ky.	Tenn.	Ala	Miss.
—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31	198	17	143	93	358	240	61	186	732	310	341	399	—	195	62	59	—
—	—	—	—	—	—	—	20	122	—	—	—	—	—	—	—	126	29
—	—	—	—	28	—	—	—	—	42	—	—	—	—	23	—	—	—
—	—	—	9	—	48	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	12	4	29	45	61	130	—	—	—	—	—	11	54	23	10
68	346	17	1,081	26	1,300	616	713	324	—	201	514	2	16	338	859	904	335
—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—	—	—
—	1	—	6	—	11	3	5	6	11	7	6	2	—	12	2	—	—
—	1	—	1	1	—	—	1	4	9	—	—	—	—	—	1	1	—
—	—	—	—	—	—	—	—	—	—	5	3	416	29	3	21	5	—
—	—	—	—	—	—	—	—	—	—	3	—	—	—	11	—	—	—
—	—	—	—	—	—	52	8	5	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26	35	—	602	259	1,151	429	423	833	606	406	331	578	381	162	601	1,189	503
—	—	—	—	—	—	—	—	—	27	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	43	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	8	—	3	61	—	—	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	13	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	25	—	40	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	84	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	—
—	—	—	—	—	—	—	—	—	—	—	—	50	15	—	—	—	—

West South Central				Mountain								Pacific				
Ark.	La.	Okla.	Texas	Mont.	Idaho	Wyo.	Colo.	N.M.	Ariz.	Utah	Nev.	Wash.	Ore.	Calif.	Alaska	Hawaii
—	—	—	207	—	—	—	—	—	—	—	—	—	—	—	—	—
180	116	151	1,328	—	—	—	—	134	2	—	—	—	—	—	—	—
2	677	70	410	79	100	108	267	18	—	109	3	18	—	—	—	—
2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	1	4	—	—	—	—	1	41	—	24	—	—
—	—	—	—	5	—	9	36	9	4	9	2	9	—	9	—	—
—	—	—	—	—	—	—	—	—	45	9	37	335	244	1,302	—	59
—	—	—	—	—	—	—	—	—	—	—	—	—	5	287	—	—
—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—
—	—	—	—	109	52	8	7	—	—	16	—	77	49	—	—	—
—	90	—	109	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
39	1	—	222	80	163	37	121	240	252	163	128	606	405	2,477	168	170
122	262	36	160	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
170	524	378	791	293	146	83	352	151	3	123	—	118	6	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	100	—	—
4	16	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
35	20	4	22	—	—	—	—	—	—	—	—	—	—	—	—	—
4	—	27	8	—	—	—	—	—	—	—	—	—	—	—	—	—
10	22	111	1,255	—	8	22	128	110	8	58	3	12	—	39	—	—
738	973	133	2,824	283	67	32	123	161	314	7	48	302	183	1,179	—	—
—	—	—	—	2	1	6	60	—	—	—	—	—	—	—	—	—
—	—	—	21	—	—	—	3	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	14	73	5	—	—
—	—	—	—	7	8	1	—	—	—	13	2	24	7	17	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	120	—	—
48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(xxx) Latest data available. Company either did not respond to the 1983 questionnaire or did not answer all of the questions fully.
(x) Company markets in these states but refuses to disclose the number of outlets involved.
Source: NPN questionnaires and 1982 Factbook.

Branded Retail Outlets (cont'd.)

Company	TOTAL BRANDED RETAIL OUTLETS*	TOTAL NUMBER OF STATES WHERE GASOLINE BRAND IS MARKETED†	West North Central						
			Minn.	Iowa	Mo.	N.D.	S.D.	Neb.	Kan.
Getty Refining & Marketing Co.	4,494	28	310	332	465	35	35	168	316
Giant Industries, Inc.	18	2	—	—	—	—	—	—	—
Golden Gate Petroleum	3	1	—	—	—	—	—	—	—
Growmark, Inc.	260	3	—	115	—	—	—	—	—
Gulf Oil Corp.	14,598	28	—	—	—	—	—	—	—
Gull Industries	103	2	—	—	—	—	—	—	—
Harrell Petroleum Co. (xxx)	27	1	—	—	—	—	—	—	—
Harris Enterprises	41	2	—	—	—	—	—	—	—
Highland Petroleum	12	6	—	—	—	—	1	3	—
Highway Oil, Inc.	218	25	—	1	12	1	4	—	18
Barney Holland Oil Co.	58	1	—	—	—	—	—	—	—
Horkey Oil Co.	25	1	—	—	—	—	—	—	—
Horn Distributing Co.	22	1	—	—	—	—	—	—	—
Hudson Oil Co.	265	NA	—	—	—	—	—	—	—
Husky Oil Co. (xxx)	562	17	—	2	—	3	5	46	2
JS & J Service, Inc.	19	2	—	—	—	—	—	—	—
Kellett Oil Co.	20	3	—	—	15	—	—	—	—
Kent Oil Co.	20	1	—	—	—	—	—	—	—
Kerr-McGee Refining Corp.	1,814	18	57	132	133	8	35	98	166
Krause General Oil Corp. (xxx)	52	1	—	32	—	—	—	—	—
Kwik Shop, Inc.	100	3	—	26	—	—	—	27	47
Land O Lakes	393	6	103	134	—	5	—	68	—
Lokey Oil Co.	34	1	—	—	—	—	—	—	—
Malco Products, Inc. (xxx)	73	3	—	—	—	—	—	—	—
Martin Oil Marketing, Ltd.	132	11	1	4	—	—	—	—	—
Merritt Truax, Inc.	49	1	—	—	—	—	—	—	—
Mico Oil Co., Inc.	28	15	4	1	2	1	2	—	2
Mid-Missouri Oil Co.	7	1	—	—	7	—	—	—	—
Milder Oil Co. (xxx)	15	1	—	—	—	—	—	15	—
Mobil Oil Corp.	16,216	44	518	200	486	120	188	212	174
Munford, Inc.	485	13	—	—	—	—	—	—	—
Murphy Oil Corp.	717	14	62	—	—	—	—	—	—
Musket Corp.	120	9	—	—	4	—	—	—	38
National Convenience Stores, Inc. (xxx)	131	39	(x)	(x)	(x)	(x)	(x)	(x)	(x)
Neal, Inc.	44	1	—	—	—	—	—	—	—
Newell Oil Co.	14	1	—	—	—	—	—	—	—
Orleans Oil Co.	22	1	—	—	—	—	—	—	—
Pacer Oil Co.	15	2	—	—	—	—	—	—	—
Curtis Parker Oil Co.	36	1	—	—	—	—	—	—	—
Peavey Oil Co.	6	1	—	—	—	—	—	—	—
Pester Corp.	214	10	13	97	22	—	5	15	18
Phillips Petroleum Co.	12,035	38	505	516	881	39	118	283	351
Piasa Motor Fuels	15	2	—	—	2	—	—	—	—
Powerline Oil Co.	33	2	—	—	—	—	—	—	—
Pride of Texas Dist. Co. (xxx)	29	1	—	—	—	—	—	—	—
Quortrap Petroleum Co. (xxx)	12	1	—	—	—	—	—	—	—
Racetrac Petroleum, Inc.	140	13	—	—	1	—	—	—	—
River City Petroleum (xxx)	18	1	—	—	—	—	—	—	—
Sahara Oil Co. (xxx)	22	1	—	—	—	—	—	—	—
Schaeffer Oil Co. (xxx)	29	5	1	—	—	5	13	3	—
Self Service Oil Co.	19	4	—	2	5	—	—	—	—
Shell Oil Co.	12,282	40	—	57	216	—	—	—	—
Southern Counties Oil Co. (xxx)	5	1	—	—	—	—	—	—	—
Standard Oil Co. (Ohio)	2,200	20	—	—	—	—	—	—	—
Star Service & Petroleum Co.	186	19	—	(x)	(x)	—	—	(x)	(x)
J.D. Streett & Co. (xxx)	356	5	—	15	168	—	—	—	—
Suburban Propane Gas Corp.	145	5	—	—	—	—	—	—	—
Sun Co.	7,866	30	—	364	331	—	—	9	—
Sunny Service Stations, Inc.	10	1	—	—	—	—	—	—	—
Sunshine Jr. Stores (xxx)	307	5	—	—	—	—	—	—	—
Tenneco Oil Co. (xxx)	484	17	—	—	—	—	—	—	—
Texaco, Inc.	18,692	45	—	—	126	—	34	64	—
Texas Star, Inc.	8	1	—	—	—	—	—	—	—
Thornton Oil Corp.	87	15	—	—	—	—	—	—	—
Time Oil Co.	213	5	—	—	—	—	—	—	—
Tommy Oil Co., Inc. (xxx)	36	12	—	—	3	—	—	—	2
Tooley Oil Co.	11	1	—	—	—	—	—	—	—
Total Petroleum, Inc.	1,797	21	88	137	346	4	22	99	329
Truax Corp.	75	2	—	—	—	—	—	—	—
Union Oil Co. of Calif.	12,669	45	268	68	12	8	9	3	1
Warelubco, Inc.	91	6	—	15	3	—	—	—	—
Webster Oil Co.	18	1	—	—	18	—	—	—	—
Western Marketing, Inc.	53	2	—	—	—	—	—	—	1
Wickland Oil Co.	85	3	—	—	—	—	—	—	—
World Oil	93	1	—	—	—	—	—	—	—

---

*Total branded retail outlets include garages, motels, C-stores, and service stations. By U.S. Census Bureau definition, only establishments generating 50% or more of their income from the sale of petroleum products and services are service stations.

†Total number of states where gasoline is branded includes the District of Columbia.

West South Central				Mountain								Pacific				
Ark.	La.	Okla.	Texas	Mont.	Idaho	Wyo.	Colo.	N.M.	Ariz.	Utah	Nev.	Wash.	Ore.	Calif.	Alaska	Hawaii
1	—	355	5	—	—	2	86	—	—	—	—	—	—	88	—	—
—	—	—	—	—	—	—	—	2	16	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(x)	(x)	(x)	(x)	—	—	—	—	(x)	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	75	28	—	—	—
—	—	—	27	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	3	38	—	—	—
1	—	3	—	—	—	—	1	—	—	—	—	—	—	—	—	—
—	1	—	12	—	—	4	2	—	—	—	—	—	—	—	—	—
—	—	—	58	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	25	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	22	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1	92	37	55	92	19	5	142	18	37	7	2	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	18	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—
231	—	355	215	—	—	—	—	51	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	34	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	14	—	—	—	—	46	13	—	—	—	—	—	—	—
—	—	—	1	—	—	—	—	—	—	—	—	—	—	2	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	49	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
88	175	92	1,157	—	—	—	—	25	151	—	19	371	315	1,664	—	—
17	60	—	60	—	—	—	—	—	—	—	—	—	—	—	—	—
15	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	1	60	6	—	—	—	9	2	—	—	—	—	—	—	—	—
(x)	—	—	—	(x)	(x)	(x)	—	(x)	—	(x)	—	(x)	(x)	—	(x)	(x)
—	—	—	44	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	14	—	—	—	—	—	—	—	—	—	—	—	—	—
—	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	—	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—
—	—	—	—	—	—	3	39	—	—	—	—	—	—	—	—	—
295	222	581	1,556	—	90	62	303	198	39	126	21	4	4	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	27	—	6
—	—	—	29	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	12	—	—	—	—	—	—	—	—	—	—	—	—	—
4	10	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	18	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	22	—	—	—	—	—	—	—
—	—	—	—	—	—	7	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
92	420	1	624	—	37	—	22	116	144	10	61	367	257	1,804	—	73
—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—
(x)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(x)	(x)	(x)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	14	—	—	—	12	79	38	2	—	—	—	—	—	—
2	—	292	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	10	—	—	—
—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	46	—	39	—	—	—	14	—	—	—	—	—	—	—	—	—
438	868	493	2,119	—	79	74	286	177	196	154	56	468	392	1,221	92	50
—	—	—	8	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	2	—	—	—	—	—	10	140	14	47	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	—	—
21	6	155	26	—	—	—	47	11	24	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	3	72	—	—	—
101	26	3	90	4	63	4	1	2	145	43	60	355	281	2,025	106	140
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	52	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	6	—	1	78	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	93	—	—

(xxx) Latest data available. Company either did not respond to the 1983 questionnaire or did not answer all of the questions fully.
(x) Company markets in these states but refuses to disclose the number of outlets involved.
Source: NPN questionnaires and 1982 Factbook.

Average Number of Employees in Oil

(As of Jan. 1, 1982)

	Mining	Manufacturing		Transportation		Wholesale	Retail	
	Crude Oil and Natural Gas Extraction	Petroleum Refining	Lubricating Oils and Greases	Pipelines (Except Natural Gas)	Gas Production and Distribution	Petroleum and Petroleum Products	Gasoline Service Stations	Total
Alabama	2,716	419	36	96	2,555	4,349	7,428	17,059
Alaska	7,064	N.D.	0	N.D.	261	307	835	8,467
Arizona	145	100	0	100	980	1,576	7,330	10,231
Arkansas	3,994	741	N.D.	330	2,399	2,387	4,557	14,408
California	37,969	25,863	873	907	10,172	16,469	61,405	153,658
Colorado	25,104	595	31	163	2,348	3,327	9,389	40,957
Connecticut	280	N.D.	90	N.D.	1,300	2,670	8,940	13,280
Delaware	36	1,005	10	0	389	499	1,491	3,430
Florida	696	139	165	71	2,153	7,399	26,897	37,520
Georgia	122	105	126	494	3,620	6,393	14,260	25,120
Hawaii	N.D.	462	0	0	362	469	3,307	4,600
Idaho	282	0	0	15	532	1,643	1,984	4,456
Illinois	7,300	7,600	850	1,100	8,900	10,500	27,200	63,450
Indiana	922	3,259	402	525	3,166	4,282	15,625	28,181
Iowa	12	0	47	190	1,219	3,621	10,759	15,848
Kansas	17,307	4,629	357	2,162	4,857	2,681	6,922	38,915
Kentucky	3,421	3,716	2	169	2,970	3,081	9,379	22,738
Louisiana	94,721	15,288	519	1,124	7,092	6,588	9,438	134,770
Maine	N.A.	0	0	N.A.	N.A.	1,300	2,300	3,600
Maryland	67	0	197	0	1,451	3,532	12,960	18,207
Massachusetts	29	N.D.	338	N.D.	5,020	3,712	13,614	22,713
Michigan	4,700	2,183	431	243	8,382	6,496	20,170	42,605
Minnesota	301	1,003	106	198	2,677	2,877	15,067	22,229
Mississippi	11,778	1,379	47	179	2,235	3,171	4,743	23,532
Missouri	300	N.A.	280	250	5,000	7,100	13,270	26,200
Montana	6,852	1,074	0	100	113	1,760	2,596	12,495
Nebraska	1,053	62	N.D.	110	3,910	1,774	6,125	13,034
Nevada	744	48	N.D.	22	541	552	3,599	5,506
New Hampshire	2	0	1	3	317	666	2,464	3,453
New Jersey	131	9,260	989	159	1,994	4,715	18,258	35,506
New Mexico	16,328	1,019	17	251	3,686	1,846	4,149	27,296
New York	2,463	10,708	396	125	7,139	14,096	27,830	62,757
North Carolina	8	0	165	120	2,490	7,166	10,243	20,192
North Dakota	9,286	255	0	135	20	2,349	2,210	14,255
Ohio	12,413	10,305	648	750	7,951	6,550	25,044	63,661
Oklahoma	92,100	8,200	390	2,700	5,500	7,900	5,200	121,990
Oregon	125	0	7	0	1,526	2,401	7,880	11,939
Pennsylvania	5,061	13,396	1,397	719	9,089	11,040	28,079	68,781
Rhode Island	83	0	0	0	859	668	2,097	3,707
South Carolina	N.A.	N.A.	N.A.	N.A.	581	3,743	6,543	10,867
South Dakota	155	24	0	63	N.D.	1,480	2,647	4,369
Tennessee	1,124	319	27	48	1,771	4,498	12,251	20,038
Texas	278,896	43,960	962	5,968	28,833	26,724	36,279	421,622
Utah	5,915	939	N.A.	109	2,769	2,057	4,319	16,108
Vermont	0	0	0	0	142	351	1,676	2,169
Virginia	300	200	0	100	2,500	7,700	14,100	24,900
Washington*	103	1,625	N.D.	89	1,571	2,993	9,397	15,778
West Virginia	13	291	2,992	46	492	517	554	4,905
Wisconsin*	17	150	112	157	2,865	4,547	14,324	22,172
Wyoming	22,008	1,804	N.D.	424	914	1,162	2,991	29,303
Dist. of Columbia	34	150	0	0	726	369	1,047	2,326
Total	**673,940**	**172,275**	**13,010**	**20,514**	**168,339**	**226,053**	**561,172**	**1,835,303**

N.D. = Non-Disclosure; N.A. = Not Available; * = 1980 data.

Source: Independent Petroleum Assn. of America, "Oil Industry in Your State, 1982."

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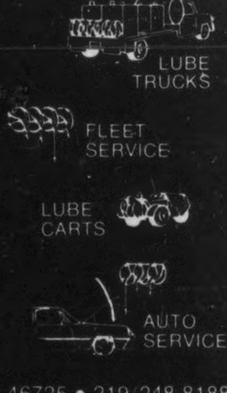

How Distillates Were Used in 1981

(Add 000 bbl.)

Use	1981	1980	% Change	% Share of total distillate use in 1981	% Share of total distillate use in 1980
Heating	(a)	(a)	—	—	—
Residential ...	197,400	227,361	(13.2)	19.1	20.9
Commercial ..	78,663	92,136	(14.6)	7.6	8.5
Industrial	80,216	86,069	(6.8)	7.8	7.9
Farm	73,615	69,665	5.7	7.1	6.4
Oil Company .	24,205	29,185	(17.1)	2.3	2.7
Elec. Utils. ...	31,812	18,192	74.9	3.1	1.7
Railroads	100,482	102,022	(1.5)	9.7	9.4
Vessels	35,201	41,025	(14.2)	3.4	3.8
Military	17,763	19,138	(10.3)	1.7	1.8
Highway diesel	323,431	340,002	(4.9)	31.3	31.3
Off-highway diesel	38,851	51,705	(24.9)	3.8	4.8
All other	21,032	19,994	5.2	2.0	1.8
Total	**1,032,476**	**1,086,709**	**(5.0)**	—	—

(a) Separate heating category no longer available. The sum of the commercial and industrial categories roughly equals the heating totals of prior years.
Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July, 1982.

How Resid Was Used in 1981

(Add 000 bbl.)

Use	1981	1980	% Change	% Share of total residual use in 1981	% Share of total residual use in 1980
Heating	(a)	(a)	—	—	—
Commercial ..	67,035	98,034	(31.6)	8.8	10.5
Industrial	117,024	163,564	(28.5)	15.4	17.4
Oil Company .	51,870	59,519	(12.9)	6.8	6.3
Elec. Utils. ...	325,486	390,105	(16.6)	42.7	41.6
Railroads	178	665	(73.2)	—	—
Vessels	188,632	213,131	(11.5)	24.8	22.7
Military	7,008	8,066	(13.1)	0.9	0.9
All other	4,795	4,382	9.4	0.6	0.5
Total	**762,030**	**937,466**	**(18.7)**	—	—

(a) Separate heating category no longer available. The sum of the commercial and industrial categories roughly equals the heating totals of prior years.
Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July, 1982.

How Kerosine Was Used in 1981

(Add 000 bbl.)

Use	1981	1980	% Change	% Share of total kerosine use in 1981	% Share of total kerosine use in 1980
Heating	(a)	(a)	—	—	—
Residential ...	15,052	18,807	(20.0)	32.5	32.4
Commercial ..	12,229	7,161	70.8	26.4	12.4
Industrial	3,871	8,556	(54.6)	8.4	14.8
Farm	1,591	2,069	(23.1)	3.4	3.4
All other	13,563	21,377	(36.7)	29.3	36.9
Total	**46,306**	**57,970**	**(20.1)**	—	—

(a) Separate heating category no longer available. The sum of the commercial and industrial categories roughly equals the heating totals of prior years.
Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July, 1982.

How New Homes Are Heated

Fuel oil's position in the new homes market continued to erode in 1981, the most recent year for which data are available. Only in the Northeast did oil make any showing at all. Nationwide oil dropped to 2% of the total of new homes built in 1981.

Region	New Homes Completed (Add 000)	Share of New Homes by Fuels and Percentages			
		Gas	Electric	Oil	Other
Northeast	87	35%	39%	13%	14%
North Central ...	140	62	26	—	10
South	408	31	64	—	4
West	183	51	41	—	8
Total 1981	**819**	**41%**	**50%**	**2%**	**7%**
Total 1980	**957**	**41%**	**50%**	**3%**	**5%**

Source: U.S. Department of Commerce, Construction Reports C25-81-13 July, 1982.

Gas: Who Uses It for Heat

Although gas added more than 900-million new consumers in 1981, it slipped for the first time in years in both new homes and conversions. New homes were down 9.1% from 1980's total of 500,000 while conversions skidded 22% from the preceding year's total of 583,000.

	% of Gas-heated homes to total gas-using homes	Consumers Added in 1981 (Add 000)		
		New homes	Existing homes	Total added
New England	65.9%	6.6	31.2	37.8
Mid-Atlantic	61.6	33.0	171.9	204.9
East North Central	93.3	60.1	100.6	160.7
West North Central	96.7	32.1	20.6	52.7
South Atlantic	90.6	53.7	102.5	156.2
East South Central	98.0	16.9	4.0	20.9
West South Central	99.4	67.1	1.6	68.7
Mountain	98.5	59.8	3.6	63.4
Pacific	94.1	131.6	15.6	147.2
Total	**88.3%**	**460.9**	**451.6**	**912.5**
% Change '81 vs. '80 ...	—	-9.1%	-22.5%	-16.3%

Source: American Gas Assn., Home Heating Survey, 1981.

Gas Heat Equipment Shipments

Shipments of central heating furnaces and boilers for gas-fired continued the slippage of recent years, according to Gas Appliance Manufacturers Assn. Shipments of furnaces fell 17.8% in 1982 while those of boilers dropped 8.8%. About the only bright spot in the entire year was that of residential wall furnaces. They rose 4.3%. The slump paralleled the decline in the economy generally.

Class and Type of Equipment	1982	1981	% Change
Central Heating:			
Furnaces	1,165,200	1,416,700	-17.8%
Boilers	147,600	161,600	-8.8
Space Heating:			
Wall Furnaces Vented	132,630	127,160	-14.3
RV Systems	109,370	115,671	-5.4
Unit Heaters	126,230	142,660	-11.5
Duct Furnaces	17,040	17,675	-3.6

Source: Gas Appliance Manufacturers Assn.

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Distillate Sales in 1981 . . .

(Add 000 bbl.)

Destination	Residential		Commercial		Industrial		Oil Company	
	1981	1980(a)	1981	1980(a)	1981	1980(a)	1981	1980(a)
PAD District 1								
New England States								
Connecticut	12,979	13,669	2,940	2,918	958	2,571	51	82
Maine	5,234	6,388	1,745	1,848	326	377	58	23
Massachusetts	18,747	22,773	5,773	7,525	1,526	1,361	45	56
New Hampshire	3,485	3,540	534	1,050	379	367	17	15
Rhode Island	2,573	3,306	382	618	208	285	8	11
Vermont	2,013	2,193	555	620	131	163	10	15
Central Atlantic States								
Delaware	1,031	1,316	634	635	161	282	36	5
District of Columbia	282	751	261	648	78	37	2	2
Maryland	6,805	8,810	1,572	2,870	1,486	1,715	166	194
New Jersey	23,217	24,014	7,680	9,181	7,635	5,684	680	176
New York	35,129	37,775	12,628	14,518	3,629	6,406	247	318
Pennsylvania	24,260	27,836	5,172	5,867	5,466	6,140	728	728
Lower Atlantic States								
Florida	985	1,216	2,578	1,928	1,937	2,119	380	374
Georgia	184	578	1,230	316	1,158	1,638	53	80
North Carolina	5,529	7,039	1,346	1,680	1,611	1,968	82	82
South Carolina	1,432	1,587	434	481	583	672	64	56
Virginia	5,585	7,396	1,399	1,643	1,570	1,948	906	112
West Virginia	894	1,181	712	266	1,734	1,775	173	292
PAD 1 Total	**150,364**	**171,368**	**47,595**	**54,612**	**30,576**	**35,508**	**3,706**	**2,621**
PAD District 2								
Illinois	2,624	3,553	4,070	2,128	2,186	2,043	487	595
Indiana	4,110	5,459	1,142	2,010	2,447	1,944	175	205
Iowa	2,016	2,442	624	770	613	753	25	44
Kansas	19	155	297	370	354	267	850	531
Kentucky	573	829	603	2,664	3,346	2,205	78	323
Michigan	7,913	9,297	2,373	3,169	1,564	1,431	108	128
Minnesota	4,829	6,005	837	1,478	1,086	1,295	83	90
Missouri	1,410	1,259	775	1,023	1,249	596	184	95
Nebraska	386	376	340	185	183	126	33	36
North Dakota	1,068	1,216	393	658	450	213	486	212
Ohio	5,710	7,526	2,603	2,625	5,221	6,111	366	382
Oklahoma	96	17	525	323	926	297	2,082	902
South Dakota	702	785	251	374	94	79	67	25
Tennessee	472	317	1,121	1,027	1,399	2,080	123	233
Wisconsin	7,508	8,252	1,155	1,714	916	977	45	44
PAD 2 Total	**39,436**	**47,488**	**17,109**	**20,518**	**22,034**	**20,417**	**5,192**	**3,845**
PAD District 3								
Alabama	17	27	998	1,077	1,746	2,336	59	226
Arkansas	20	255	176	190	628	474	192	228
Louisiana	0	9	518	665	3,595	4,200	6,057	5,032
Mississippi	2	16	138	45	1,964	1,045	355	430
New Mexico	18	25	683	225	886	1,014	352	193
Texas	7	14	3,749	4,758	4,841	7,392	8,160	8,980
PAD 3 Total	**64**	**346**	**6,262**	**6,960**	**13,660**	**16,461**	**15,175**	**15,089**
PAD District 4								
Colorado	54	70	312	297	946	991	139	69
Idaho	424	425	122	195	428	501	9	24
Montana	274	374	381	302	380	240	312	152
Utah	73	102	206	893	823	709	514	108
Wyoming	26	24	125	373	2,129	2,010	2,314	1,157
PAD 4 Total	**851**	**995**	**1,146**	**2,060**	**4,706**	**4,451**	**3,288**	**1,510**
PAD District 5								
Alaska	912	1,216	533	598	722	710	6	2
Arizona	1	2	60	289	1,679	1,667	4	16
California	72	100	3,742	3,345	3,898	3,734	887	454
Hawaii	1	1	178	413	107	112	163	202
Nevada	151	193	333	368	283	307	4	3
Oregon	2,541	2,097	959	1,859	1,466	1,266	255	203
Washington	3,007	3,555	746	1,114	1,085	1,456	505	260
PAD 5 Total	**6,685**	**7,164**	**6,551**	**7,986**	**9,240**	**9,252**	**1,824**	**1,140**
U.S. Total	**197,400**	**227,361**	**78,663**	**92,136**	**80,216**	**86,089**	**29,185**	**24,205**

(a) Revised.

. . . By Categories and Uses

Destination	Electric Utility		Farm		Military		Railroad		Vessel Bunkering	
	1981	1980	1981	1980(a)	1981	1980	1981	1980(a)	1981	1980(a)
PAD District 1										
New England States										
Connecticut	31	108	53	85	0	1	25	83	7	29
Maine	36	64	78	112	49	23	122	161	85	29
Massachusetts	325	412	71	135	294	101	148	200	121	155
New Hampshire	15	15	50	64	4	11	2	5	9	9
Rhode Island	19	30	17	18	23	1	47	0	37	33
Vermont	17	17	92	117	0	1	15	27	6	6
Central Atlantic States										
Delaware	120	193	97	111	49	44	21	22	9	52
District of Columbia	713	1,288	0	0	58	87	17	63	0	1
Maryland	531	1,671	416	518	426	500	622	745	579	620
New Jersey	949	1,956	226	207	142	71	291	275	1,496	1,798
New York	897	760	923	1,203	228	39	1,208	1,209	802	1,027
Pennsylvania	1,686	2,279	1,057	1,322	163	171	2,959	3,833	321	371
Lower Atlantic States										
Florida	2,088	2,533	744	1,079	60	61	1,748	1,743	4,574	2,248
Georgia	439	774	715	1,085	272	237	1,909	2,511	389	420
North Carolina	433	496	1,004	1,437	94	69	916	1,273	87	125
South Carolina	499	667	661	750	130	134	384	437	192	166
Virginia	574	887	351	510	440	268	2,195	2,388	630	762
West Virginia	810	702	79	93	2	24	1,487	1,517	189	143
PAD 1 Total	**10,182**	**14,852**	**6,634**	**8,846**	**2,434**	**1,843**	**14,116**	**16,492**	**9,533**	**7,994**
PAD District 2										
Illinois	387	970	2,965	3,185	21	552	5,230	6,390	149	251
Indiana	693	835	2,175	2,124	81	10	3,385	3,426	110	79
Iowa	2	39	3,305	3,417	46	29	1,007	1,384	25	25
Kansas	62	43	1,986	2,182	36	11	3,810	4,364	1	1
Kentucky	306	237	611	399	30	45	3,232	3,261	2,202	3,162
Michigan	604	1,049	3,003	2,361	323	386	1,784	1,862	70	62
Minnesota	52	608	3,467	3,619	9	43	1,524	1,653	323	262
Missouri	45	471	2,987	3,130	43	24	1,375	1,512	674	592
Nebraska	93	189	2,646	3,020	5	23	896	1,461	0	12
North Dakota	91	84	1,852	1,825	6	562	1,135	1,165	0	0
Ohio	572	1,858	1,842	2,252	49	87	6,869	6,780	99	137
Oklahoma	32	18	884	1,090	0	82	1,659	700	0	2
South Dakota	35	103	1,331	1,420	21	41	90	155	0	0
Tennessee	243	397	797	774	9	28	2,921	2,667	1,940	999
Wisconsin	60	552	2,121	1,952	28	12	1,014	1,027	168	174
PAD 2 Total	**3,277**	**7,453**	**31,972**	**32,750**	**707**	**1,935**	**35,931**	**37,807**	**5,761**	**5,758**
PAD District 3										
Alabama	49	128	1,103	1,335	40	91	4,064	4,277	1,434	619
Arkansas	15	335	2,905	2,712	16	29	2,698	2,425	110	94
Louisiana	1,387	2,116	2,081	2,334	1,557	83	3,193	3,114	6,702	5,757
Mississippi	93	299	2,277	2,407	70	42	1,037	1,414	447	351
New Mexico	150	276	335	294	49	12	2,256	2,064	0	0
Texas	380	2,050	8,331	9,069	2,171	6,028	12,916	11,332	10,965	9,686
PAD 3 Total	**2,074**	**5,204**	**17,032**	**18,151**	**3,903**	**6,285**	**26,164**	**24,626**	**19,658**	**16,507**
PAD District 4										
Colorado	83	164	1,089	1,248	95	80	1,655	2,256	0	0
Idaho	0	0	1,009	897	85	126	610	927	0	0
Montana	40	94	908	769	4	24	1,455	1,841	0	0
Utah	59	77	156	180	0	9	1,743	1,790	0	0
Wyoming	136	145	312	312	4	14	3,963	3,155	0	0
PAD 4 Total	**318**	**480**	**3,474**	**3,406**	**188**	**253**	**9,426**	**9,969**	**0**	**0**
PAD District 5										
Alaska	544	502	21	17	357	332	116	60	955	1,143
Arizona	24	1,003	837	1,022	3	16	1,329	1,181	0	0
California	865	897	7,450	7,002	6,155	4,783	7,894	6,601	2,566	2,363
Hawaii	789	886	450	391	3,193	2,727	10	10	66	28
Nevada	14	83	120	115	12	9	580	854	0	0
Oregon	36	366	705	814	15	54	3,227	2,662	761	152
Washington	69	86	970	1,101	796	901	1,689	1,760	1,725	1,256
PAD 5 Total	**2,341**	**3,823**	**10,553**	**10,462**	**10,531**	**8,822**	**14,845**	**13,128**	**6,073**	**4,942**
U.S. Total	**18,192**	**31,812**	**69,665**	**73,615**	**17,763**	**19,138**	**100,482**	**102,022**	**41,025**	**35,201**

(a) Revised. (table continued on next page)

Distillate Sales in 1981 (Continued)

(Add 000 bbl.)

Destination	On-Highway 1981	On-Highway 1980	Off-Highway 1981	Off-Highway 1980(a)	Other 1981	Other 1980(a)	Total 1981	Total 1980(a)
PAD District 1								
New England States								
Connecticut	2,262	2,446	380	427	59	80	19,745	22,499
Maine	1,248	1,349	176	183	109	70	9,266	10,627
Massachusetts	4,419	4,346	282	253	404	96	32,155	37,413
New Hampshire	692	656	113	102	13	11	5,313	5,845
Rhode Island	590	638	25	38	84	68	3,993	5,046
Vermont	753	699	222	196	14	22	3,828	4,076
Central Atlantic States								
Delaware	862	825	78	169	35	48	3,133	3,702
District of Columbia	376	406	10	14	308	139	2,125	3,436
Maryland	4,730	3,891	571	667	461	216	18,365	22,417
New Jersey	7,460	8,066	562	671	635	620	50,973	52,719
New York	7,227	7,814	774	1,066	571	380	64,263	72,515
Pennsylvania	15,311	16,555	2,476	2,582	378	382	59,977	68,066
Lower Atlantic States								
Florida	12,968	11,704	630	1,088	1,124	2,427	29,816	28,520
Georgia	12,067	10,554	171	394	801	810	19,388	19,397
North Carolina	9,526	8,987	370	496	230	168	21,228	23,820
South Carolina	4,968	5,372	193	267	301	141	9,841	10,730
Virginia	9,038	7,466	574	852	376	174	23,638	24,406
West Virginia	2,833	2,904	327	1,079	210	364	9,450	10,340
PAD 1 Total	**97,330**	**94,678**	**7,934**	**10,544**	**6,093**	**6,216**	**386,497**	**425,574**
PAD District 2								
Illinois	15,037	14,308	826	1,298	445	813	34,427	36,086
Indiana	13,599	13,551	575	630	469	215	28,961	30,488
Iowa	6,334	6,312	314	324	63	254	14,374	15,793
Kansas	5,468	5,449	331	512	25	38	13,239	13,923
Kentucky	5,911	5,890	947	3,373	378	210	18,217	22,598
Michigan	8,230	7,140	481	668	204	288	26,657	27,841
Minnesota	5,957	5,936	499	748	48	89	18,714	21,826
Missouri	8,460	8,430	732	938	69	80	18,003	18,150
Nebraska	3,438	3,426	199	281	14	10	8,233	9,145
North Dakota	2,035	1,849	190	160	2	93	7,708	8,037
Ohio	16,663	16,604	3,195	2,647	1,770	1,388	44,959	48,397
Oklahoma	8,143	7,144	1,095	1,159	77	317	15,519	12,051
South Dakota	1,714	1,708	97	137	4	15	4,406	4,842
Tennessee	9,112	9,080	417	609	958	607	19,512	18,818
Wisconsin	7,230	7,153	442	584	39	98	20,726	22,539
PAD 2 Total	**117,331**	**113,980**	**10,340**	**14,068**	**4,565**	**4,515**	**293,655**	**310,534**
PAD District 3								
Alabama	6,782	7,570	919	1,141	728	592	17,939	19,419
Arkansas	5,458	4,942	733	2,377	165	148	13,116	14,209
Louisiana	10,031	6,756	2,068	1,959	775	779	37,964	32,804
Mississippi	5,298	4,824	991	1,332	815	700	13,487	12,905
New Mexico	5,848	3,939	1,733	1,934	216	246	12,526	10,222
Texas	31,564	28,170	5,465	7,397	1,810	1,063	90,359	95,939
PAD 3 Total	**64,981**	**56,201**	**11,909**	**16,140**	**4,509**	**3,528**	**185,391**	**185,498**
PAD District 4								
Colorado	3,458	3,358	655	838	148	294	8,634	9,665
Idaho	1,331	1,293	639	412	118	79	4,775	4,879
Montana	2,384	2,315	184	384	164	131	6,486	6,626
Utah	2,760	2,609	527	617	254	318	7,115	7,412
Wyoming	2,271	2,206	883	1,702	289	277	12,452	11,375
PAD 4 Total	**12,204**	**11,781**	**2,888**	**3,953**	**973**	**1,099**	**39,462**	**39,957**
PAD District 5								
Alaska	1,067	1,079	269	196	1,046	926	6,548	6,781
Arizona	5,323	5,137	379	769	102	228	9,741	11,330
California	28,423	27,083	2,960	2,815	2,582	2,161	67,494	61,338
Hawaii	423	428	235	247	428	470	6,043	5,915
Nevada	1,813	1,833	158	205	20	52	3,488	4,022
Oregon	5,651	5,714	599	1,558	247	306	16,462	17,051
Washington	5,456	5,517	1,180	1,210	467	493	17,695	18,709
PAD 5 Total	**48,156**	**46,791**	**5,780**	**7,000**	**4,892**	**4,638**	**127,470**	**125,146**
U.S. Total	**340,002**	**323,431**	**38,851**	**51,705**	**21,032**	**19,994**	**1,032,476**	**1,086,709**

(a) Revised.

Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July, 1982.

Residual Fuel Oil Sales in 1981 . . .

(Add 000 bbl.)

	Commercial		Industrial		Oil Company		Electric Utility		Military	
Destination	1981	1980[1]	1981	1980[1]	1981	1980[1]	1981	1980	1981	1980
PAD District 1										
New England States										
Connecticut	796	1,171	2,435	6,636	35	57	18,598	20,292	0	0
Maine	364	682	5,290	4,042	0	4	3,774	3,469	0	4
Massachusetts	3,180	4,861	3,925	2,307	74	105	40,654	44,519	98	12
New Hampshire	474	374	421	925	0	0	3,891	4,069	0	0
Rhode Island	192	180	734	629	0	1	1,241	1,337	0	0
Vermont	155	236	192	235	0	0	0	0	0	0
Central Atlantic States										
Delaware	1,980	4,271	1,225	1,704	0	0	4,989	5,995	0	0
District of Columbia	79	38	1	28	0	0	110	286	182	66
Maryland	210	1,159	1,454	2,352	99	222	5,759	7,722	63	135
New Jersey	6,468	10,965	5,099	10,758	4,192	6,239	10,085	12,400	126	57
New York	13,900	25,470	7,549	14,043	221	624	64,047	61,199	932	0
Pennsylvania	1,606	1,523	5,263	7,537	2,278	3,878	15,650	16,854	1,085	230
Lower Atlantic States										
Florida	825	1,476	5,798	13,421	2,012	35	74,640	70,135	119	217
Georgia	9	11	3,156	5,294	16	33	388	128	49	31
North Carolina	103	491	5,141	8,464	7	15	0	39	133	49
South Carolina	102	36	2,555	4,184	43	67	1,357	1,991	49	33
Virginia	384	446	2,608	4,983	66	135	5,681	14,605	293	152
West Virginia	2	5	726	1,090	273	370	0	0	0	0
PAD 1 Total	**30,829**	**53,395**	**53,572**	**88,632**	**9,316**	**11,785**	**250,864**	**265,060**	**3,129**	**986**
PAD District 2										
Illinois	1,260	2,585	4,922	7,437	5,033	4,787	10,083	12,853	0	213
Indiana	79	2,386	4,511	6,622	2,846	5,119	0	0	98	57
Iowa	28	77	58	269	0	0	7	14	7	0
Kansas	0	0	363	361	319	627	14	55	0	0
Kentucky	18	19	651	567	229	275	0	0	252	105
Michigan	114	219	1,555	2,672	350	446	6,490	8,335	217	18
Minnesota	19	31	954	1,535	196	221	0	268	0	37
Missouri	29	545	337	311	262	378	0	25	6	111
Nebraska	17	23	37	29	0	0	0	26	0	0
North Dakota	61	393	812	108	256	159	0	0	0	0
Ohio	28	373	4,023	3,898	954	1,469	234	79	14	0
Oklahoma	0	30	108	251	637	438	0	0	0	0
South Dakota	14	18	132	82	0	0	2	4	0	0
Tennessee	77	48	1,033	1,325	28	22	0	0	0	0
Wisconsin	12	30	640	1,246	109	138	10	76	0	10
PAD 2 Total	**1,756**	**6,777**	**20,136**	**26,713**	**11,219**	**14,079**	**16,840**	**21,735**	**594**	**551**
PAD District 3										
Alabama	0	4	2,458	5,306	20	78	0	0	0	475
Arkansas	150	626	1,759	2,057	0	0	540	2,789	0	0
Louisiana	15,529	19,241	10,601	10,716	2,608	6,557	2,825	5,139	37	2,504
Mississippi	2,774	4,865	773	2,709	776	372	2,035	4,124	0	0
New Mexico	0	0	791	925	0	294	47	79	0	0
Texas	2,550	3,672	13,377	12,355	15,035	9,665	1,284	853	407	758
PAD 3 Total	**21,003**	**28,408**	**29,759**	**34,068**	**18,439**	**16,966**	**6,731**	**12,984**	**444**	**3,737**
PAD District 4										
Colorado	3	3	125	130	0	1,079	32	141	0	0
Idaho	29	365	26	95	0	0	0	0	0	0
Montana	0	5	462	390	1,996	2,525	0	0	0	0
Utah	0	786	908	1,171	72	587	52	12	0	0
Wyoming	5	20	151	408	1,622	1,166	0	0	0	0
PAD 4 Total	**37**	**1,179**	**1,672**	**2,194**	**3,690**	**5,357**	**84**	**153**	**0**	**0**
PAD District 5										
Alaska	0	4	1	0	0	0	222	378	7	0
Arizona	36	0	21	139	0	0	170	890	0	0
California	11,529	6,915	4,275	4,029	6,432	8,703	39,919	75,914	933	459
Hawaii	55	26	290	317	782	940	10,471	10,271	127	47
Nevada	25	7	40	2	0	0	185	2,494	0	0
Oregon	995	890	1,666	2,367	99	178	0	0	0	4
Washington	770	433	5,592	5,103	1,893	1,511	0	226	1,774	2,282
PAD 5 Total	**13,410**	**8,275**	**11,885**	**11,957**	**9,206**	**11,332**	**50,967**	**90,173**	**2,841**	**2,792**
U.S. Total	**67,035**	**98,034**	**117,024**	**163,564**	**51,870**	**59,519**	**325,486**	**390,105**	**7,008**	**8,066**

. . . By Categories and Uses

	Railroad		Vessel Bunkering		Other		Total	
Destination	**1981**	**1980(a)**	**1981**	**1980**	**1981**	**1980(a)**	**1981**	**1980(a)**
PAD District 1								
New England States								
Connecticut	0	0	4	53	83	0	21,951	28,209
Maine	6	5	634	201	22	6	10,090	8,413
Massachusetts	0	2	975	889	767	253	49,673	52,948
New Hampshire	0	0	49	49	0	0	4,835	5,437
Rhode Island	0	0	49	58	11	25	2,227	2,230
Vermont	0	0	0	0	4	0	351	471
Central Atlantic States								
Delaware	0	421	292	392	185	106	8,671	12,889
District of Columbia	0	0	0	0	17	26	389	444
Maryland	0	0	4,729	4,400	82	100	12,396	16,090
New Jersey	0	9	12,287	12,016	22	723	38,279	53,167
New York	0	0	10,922	11,367	297	169	97,868	112,872
Pennsylvania	0	7	4,144	4,591	314	157	30,340	34,777
Lower Atlantic States								
Florida	0	0	6,777	11,437	176	234	90,347	96,955
Georgia	0	0	2,633	2,973	0	42	6,251	8,512
North Carolina	0	0	292	54	1	2	5,677	9,114
South Carolina	4	5	1,024	811	8	0	5,142	7,127
Virginia	2	2	3,949	4,288	89	93	13,072	24,704
West Virginia	0	0	0	0	0	0	1,001	1,465
PAD 1 Total	**12**	**451**	**48,760**	**53,579**	**2,078**	**1,936**	**398,560**	**475,824**
PAD District 2								
Illinois	7	9	0	0	94	139	21,399	28,023
Indiana	0	0	93	127	11	24	7.638	14,335
Iowa	0	0	0	0	0	0	100	360
Kansas	1	3	0	0	0	0	697	1,046
Kentucky	0	0	0	0	0	0	1,150	966
Michigan	30	31	55	176	136	37	8,947	11,934
Minnesota	0	0	273	926	18	26	1,460	3,044
Missouri	0	0	0	0	22	0	656	1,370
Nebraska	3	0	0	0	0	0	57	78
North Dakota	0	0	0	0	1	41	1,130	701
Ohio	0	0	37	256	630	207	5,920	6,282
Oklahoma	0	0	0	0	0	0	745	719
South Dakota	0	0	0	0	13	11	161	115
Tennessee	32	6	45	0	24	71	1,239	1,472
Wisconsin	32	42	46	178	22	31	871	1,751
PAD 2 Total	**105**	**91**	**549**	**1,663**	**971**	**587**	**52,170**	**72,196**
PAD District 3								
Alabama	0	0	2,208	2,927	0	30	4,686	8,820
Arkansas	0	0	0	0	0	0	2,449	5,472
Louisiana	0	0	23,899	28,131	188	398	55,687	72,686
Mississippi	0	0	3,117	5,366	250	23	9,725	17,459
New Mexico	0	0	0	0	18	7	856	1,305
Texas	58	123	35,719	44,880	241	883	68,671	73,189
PAD 3 Total	**58**	**123**	**64,943**	**81,304**	**697**	**1,341**	**142,075**	**178,931**
PAD District 4								
Colorado	0	0	0	0	5	20	165	1,373
Idaho	0	0	0	0	0	0	55	460
Montana	0	0	0	0	61	92	2,519	3,012
Utah	0	0	0	0	32	28	1,064	2,584
Wyoming	3	0	0	0	228	36	2,009	1,630
PAD 4 Total	**3**	**0**	**0**	**0**	**326**	**176**	**5,812**	**9,059**
PAD District 5								
Alaska	0	0	0	0	19	15	249	397
Arizona	0	0	0	0	0	17	227	1,046
California	0	0	63,149	66,330	226	15	126,463	162,365
Hawaii	0	0	1,116	1,395	470	255	13,311	13,251
Nevada	0	0	0	0	0	0	250	2,503
Oregon	0	0	3,644	1,105	3	18	6,407	4,562
Washington	0	0	6,471	7,755	5	22	16,505	17,332
PAD 5 Total	**0**	**0**	**74,380**	**76,585**	**723**	**342**	**163,413**	**201,456**
U.S. Total	**178**	**665**	**188,632**	**213,131**	**4,795**	**4,382**	**762,030**	**937,466**

(a) Revised.

Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July 1982.

Kerosine Sales in 1981

(Add 000 bbl.)

	Residential		Commercial		Industrial		Farm		Other		Total	
Destination	**1981**	**1980**	**1981**	**1980**	**1981**	**1980**	**1981**	**1980**	**1981**	**1980**	**1981**	**1980**
PAD District 1												
New England States												
Connecticut	195	233	11	7	6	8	0	0	203	243	415	491
Maine	233	405	45	70	1	12	1	4	10	13	290	504
Massachusetts	181	323	9	30	13	13	1	0	226	332	430	698
New Hampshire	206	322	4	9	0	0	0	0	5	9	215	340
Rhode Island	47	54	1	0	2	4	0	0	4	26	54	84
Vermont	177	230	26	44	0	0	8	5	1	4	212	283
Central Atlantic States												
Delaware	256	275	8	9	0	0	2	13	1	4	267	301
District of Columbia	2	5	1	1	1	1	0	0	69	261	73	268
Maryland	614	830	16	20	15	11	7	11	227	296	879	1,168
New Jersey	193	262	57	39	80	64	0	0	1,131	1,329	1,461	1,694
New York	1,509	1,723	158	169	82	56	19	32	304	329	2,072	2,309
Pennsylvania	1,992	2,362	183	193	118	90	44	44	314	74	2,651	2,763
Lower Atlantic States												
Florida	574	774	64	28	7	12	2	0	101	138	748	952
Georgia	34	91	18	12	10	22	1	0	209	427	272	552
North Carolina	1,939	2,747	45	118	34	37	208	282	130	75	2,356	3,259
South Carolina	553	1,200	29	25	21	50	46	45	30	32	679	1,352
Virginia	919	1,403	37	46	68	57	65	41	83	169	1,172	1,716
West Virginia	275	408	16	37	47	15	0	4	24	32	362	496
PAD 1 Total	**9,899**	**13,647**	**728**	**857**	**505**	**452**	**404**	**481**	**3,072**	**3,793**	**14,608**	**19,230**
PAD District 2												
Illinois	149	161	14	16	249	238	34	10	220	181	666	606
Indiana	537	492	9	31	82	16	67	73	14	47	709	659
Iowa	235	47	14	5	10	21	101	41	14	57	374	171
Kansas	10	5	5	10	43	36	24	192	158	249	240	492
Kentucky	474	1,751	125	622	110	140	86	0	369	399	1,164	2,912
Michigan	206	83	19	15	82	104	9	5	676	1,026	922	1,233
Minnesota	115	114	5	0	0	0	29	10	0	88	149	212
Missouri	76	57	398	171	14	5	53	41	5	41	546	315
Nebraska	29	10	10	21	14	0	24	21	10	10	87	62
North Dakota	14	5	0	0	0	0	0	10	0	0	14	15
Ohio	1,016	1,016	67	130	331	337	76	249	1,261	720	2,751	2,452
Oklahoma	15	21	38	15	43	26	91	0	115	280	302	342
South Dakota	14	10	0	0	0	5	10	0	0	0	24	15
Tennessee	901	549	72	104	67	72	0	11	484	798	1,524	1,534
Wisconsin	72	124	5	57	29	41	9	0	10	0	125	222
PAD 2 Total	**3,863**	**4,445**	**781**	**1,197**	**1,074**	**1,041**	**613**	**663**	**3,336**	**3,896**	**9,667**	**11,242**
PAD District 3												
Alabama	185	198	57	176	43	110	0	0	241	769	526	1,253
Arkansas	42	0	57	132	185	176	28	22	43	241	355	571
Louisiana	28	0	2,530	549	910	1,779	185	66	3,212	3,317	6,865	5,711
Mississippi	29	44	14	0	14	44	0	0	43	154	100	242
New Mexico	85	132	526	659	28	109	0	0	128	439	767	1,339
Texas	114	198	6,808	3,251	810	2,900	256	725	2,757	8,281	10,745	15,355
PAD 3 Total	**483**	**572**	**9,992**	**4,767**	**1,990**	**5,118**	**469**	**813**	**6,424**	**13,201**	**19,358**	**24,471**
PAD District 4												
Colorado	60	23	9	6	0	212	43	23	103	149	215	413
Idaho	0	0	0	0	8	0	0	0	9	0	17	0
Montana	0	0	0	0	0	0	9	0	17	0	26	0
Utah	26	0	60	34	9	17	0	0	60	51	155	102
Wyoming	8	0	0	23	0	33	0	6	61	0	69	62
PAD 4 Total	**94**	**23**	**69**	**63**	**17**	**262**	**52**	**29**	**250**	**200**	**482**	**577**
PAD District 5												
Alaska	0	0	0	0	0	0	0	0	36	19	36	19
Arizona	0	0	18	0	89	55	0	9	0	9	107	73
California	71	18	552	222	107	1,609	53	74	303	194	1,086	2,117
Hawaii	0	0	0	0	0	0	0	0	0	9	0	9
Nevada	36	0	18	0	0	0	0	0	18	0	72	0
Oregon	71	37	53	37	0	19	0	0	18	19	142	112
Washington	535	65	18	18	89	0	0	0	106	37	748	120
PAD 5 Total	**713**	**120**	**659**	**277**	**285**	**1,683**	**53**	**83**	**481**	**287**	**2,191**	**2,450**
U.S. Total	**15,052**	**18,807**	**12,229**	**7,161**	**3,871**	**8,556**	**1,591**	**2,069**	**13,563**	**21,377**	**46.306**	**57,970**

Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July, 1982.

U.S. Sales of Distillate Fuel Oil By Uses

(Add 000 bbl.)

Year	Residential	Commercial	Industrial	Farm	Oil Company	Electric Utilities	Diesel	Other	Total
1981 (a)	197,400 (b)	78,663 (b)	80,216 (c)	69,665 (d)	29,185 (c)	18,192	378,853 (e)	180,302 (f)	1,032,476
1980 (a)	227,261 (b)	92,136 (b)	86,089 (c)	73,615 (d)	24,205 (c)	31,812	377,136 (e)	176,355 (f)	1,086,709
1979 (a)	270,306 (b)	99,723 (b)	99,583 (c)	84,926 (d)	22,043 (c)	46,579	392,614 (e)	198,600 (f)	1,214,374

(a) In 1979, DOE changed its sampling and reporting formulas. It eliminated the "heating oils" category and added a new farm category. The sum of the first four categories is roughly related to the old heating oil category but cannot be considered comparable; (b) Primarily space and water heating; (c) Includes some space heating but primarily equipment fuel; (d) Includes space and water heating, crop drying, farm equipment, etc.; (e) Includes 38,851 off-highway in 1981, 51,705 in 1980 and 65,212 in 1979; (f) In 1981, consisted of 100,482 railroads, 41,025 vessel bunkering, 17,763 military, and 21,032 other; in 1980, consisted of 102,022 railroads, 35,201 vessel bunkering, 19,138 military and 34,812 other; in 1979, consisted of 103,493 railroads, 41,725 vessel bunkering, 18,570 military and 34,812 other. Also in 1982, DOE updated the 1981 and 1980 data as above. The pre-1979 categories follow.

Year	Heating Oils	Industrial Use	Oil Company Use	Electric Utilities	Railroads	Vessel Bunkering	Military Use	Diesel Fuel	All Other	Total
1978	533,069	94,797	19,410	77,175	99,841	37,591	20,320	367,799	14,509	1,257,061
1977	538,845	96,502	19,954	76,681	99,306	33,512	20,121	330,864	14,394	1,230,179
1976	543,895	79,956	14,523	60,570	97,467	28,330	17,574	297,249	11,365	1,150,929
1975	488,388	63,993	13,633	63,420	93,191	26,138	18,004	266,903	10,096	1,043,746
1970	521,135	43,668	11,518	24,770	88,416	19,503	12,447	194,919	10,874	927,250
1965	475,992	42,484	10,430	3,661	86,436	15,532	14,953	124,122	13,281	786,891
1960	438,010	34,271	8,347	4,742	86,490	18,730	10,793	74,562	7,380	683,325

Source: Deliveries of fuel oil and kerosine in 1981, Petroleum Supply Annual, Department of Energy, July, 1982.

U.S. Sales of Residual Fuel Oil By Uses

(Add 000 bbl.)

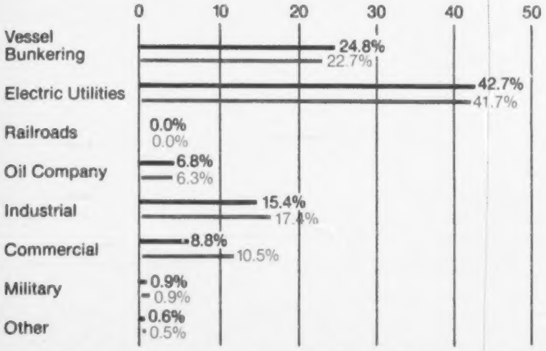
Year	Vessel Bunkering	Electric Utilities	Railroads	Oil Companies	Industrial	Commercial	Military	Other	Total
1981 (a)	188,632	325,486	178	51,870	117,024	67,035	7,008	4,795	762,030
1980 (a)	213,131	390,105	665	59,519	163,564	98,034	8,066	4,382	937,466
1979 (a)	190,543	486,636	245	51,062	198,759	82,729	7,736	16,900	1,034,610

(a) In 1979, DOE changed its sampling and reporting formulas in such a way that none of the new data are directly comparable to the pre-1979 data, which follow. Also, in its 1981 update, DOE revised the totals for 1979 and 1980.

Year	Vessel Bunkering	Electric Utilities	Railroads	Oil Company	Industrial Use	Heating Oils	Military Use	All Other	Total
1978	157,495	533,193	206	57,690	169,403	164,536	16,583	4,127	1,103,233
1977	128,966	569,429	329	60,582	171,967	168,279	16,646	4,729	1,129,927
1976	117,458	492,974	423	58,212	153,596	178,139	18,561	5,785	1,025,148
1975	96,673	454,935	583	50,487	116,675	154,103	19,068	6,066	898,572
1970	89,850	312,420	2,222	38,318	139,647	185,031	28,704	7,925	804,287
1965	73,639	114,884	4,001	34,354	140,602	156,254	40,380	10,004	574,118
1960	94,084	85,408	5,610	45,061	157,270	125,088	31,724	6,291	550,536

Sales of Residuals by Use as Percent of Total

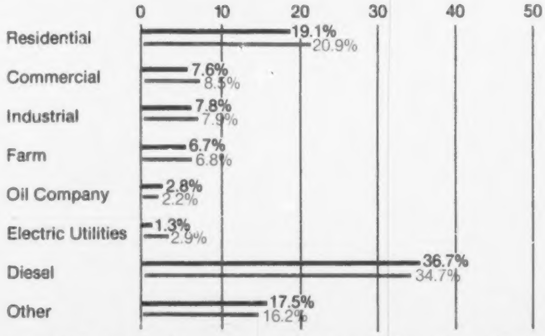
1981 = 762,030,000 bbl. 1980 = 937,466,000 bbl.



Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July 1982.

Sales of Distillates by Use as Percent of Total

1981 = 1,032,476,000 bbl. 1980 = 1,086,709,000 bbl.



Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, Department of Energy, July 1982.

World Oil Production by Area

(Add 000 bbl.)

Year	United States	Canada	Latin American	Western Europe	Middle East	Africa	Asia-Pacific	Total Free World	Communist Nations	Total World
1975	3,056,779	520,666	1,603,333	199,950	7,160,993	1,826,255	806,329	15,174,305	4,328,030	19,502,335
1976	2,976,180	488,680	1,625,069	311,858	8,115,708	2,134,861	922,818	16,575,174	4,616,366	21,191,540
1977	3,009,265	482,021	1,647,362	489,328	8,186,851	2,276,007	1,017,244	17,108,078	4,792,617	21,900,695
1978	3,175,927	483,260	1,736,427	643,149	7,884,927	2,233,791	1,037,520	17,195,001	4,963,250	22,158,251
1979	3,114,545	546,040	1,919,535	828,550	7,868,670	2,423,600	1,051,200	17,752,140	5,118,030	22,870,170
1980	3,146,502	521,184	2,036,058	893,406	6,735,498	2,226,378	1,000,278	16,559,304	5,206,350	21,765,654
1981	3,128,780	469,025	2,179,415	955,570	5,749,480	1,672,065	1,027,110	15,181,445	5,192,125	20,373,570

Source: American Petroleum Institute Data Book.

World Crude Oil Reserves by Area

(Add 000 bbl.)

Year (a)	United States	Canada	Latin America	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1976	32,682,127	6,653,002	35,368,000	368,410,570	65,085,220	21,234,230	25,487,700	554,920,849	103,000,000	657,920,849
1977	30,942,166	6,257,082	29,608,950	367,681,220	60,570,200	19,391,140	24,538,810	538,989,568	101,100,000	640,089,568
1978	29,486,402	5,970,872	40,370,000	366,166,000	59,200,150	19,749,270	26,862,500	547,805,194	98,000,000	645,805,194
1979	27,803,760	6,860,000	41,246,500	369,996,000	57,892,125	20,007,200	23,966,000	547,771,585	94,000,000	641,771,585
1980	27,051,289	6,800,000	56,472,500	361,947,300	57,072,100	19,355,200	23,476,400	522,174,789	90,000,000	642,174,789
1981	29,805,000	6,400,000	69,489,837	362,071,000	55,148,375	19,630,500	23,085,000	565,629,712	86,300,000	651,929,712
1982	29,785,000	7,300,000	84,982,270	362,839,950	56,171,630	19,150,800	24,634,500	584,864,150	85,845,000	670,709,150

(a) As of Jan. 1 of each year.
Source: American Petroleum Institute Data Book.

World Crude Oil Refining Capacity by Area

(barrels per day)

Year	United States	Other Western Hemisphere	Total Western Hemisphere	Middle East	Africa	Asia-Pacific	Europe	Total Free World	Sino Soviet Bloc	Total World
1976	15,236,621	9,713,093	24,949,714	3,284,951	1,328,200	9,868,344	19,972,306	59,403,515	12,406,000	71,809,515
1977	16,398,372	10,015,186	26,413,558	3,347,855	1,444,400	10,047,965	20,859,376	62,113,154	13,067,810	75,180,964
1978	17,047,724	10,592,020	27,352,020	3,506,484	1,467,157	10,176,819	20,728,204	63,352,984	13,938,000	77,290,984
1979	17,440,885	10,273,030	27,713,915	3,546,029	1,667,608	10,284,966	20,328,614	63,541,132	14,748,000	78,289,132
1980	17,988,121	10,683,671	28,671,792	3,518,080	1,666,108	10,386,375	20,243,747	64,486,102	15,346,000	79,832,102
1981	18,620,520	10,716,881	29,337,401	3,729,646	1,697,658	10,554,691	20,205,799	65,524,895	16,036,500	81,561,395
1982	17,889,734	10,720,055	28,609,789	3,312,152	1,761,870	10,966,825	19,444,519	64,095,155	16,533,000	80,628,155

Source: America Petroleum Institute Data Book.

World Natural Gas Production by Area

(Add 000,000 cubic feet)

Year	United States	Canada	Latin America	Middle East	Africa	Asia-Pacific	Western Europe	Total Free World	Communist Nations	Total World
1975	20,108,661	3,075,693	1,735,060	1,436,210	670,402	938,365	5,966,659	33,931,050	13,276,275	47,207,325
1976	19,952,438	3,067,353	1,722,106	1,492,772	905,792	1,173,878	6,343,593	34,657,932	14,801,281	49,459,213
1977	20,025,463	3,230,672	1,865,734	1,506,982	919,464	1,329,016	6,502,502	35,379,833	14,720,257	50,100,090
1978	19,974,033	3,128,056	2,012,912	1,579,478	1,117,416	1,469,154	6,649,855	35,930,904	15,818,398	51,749,302
1979	20,471,260	3,646,500	2,610,000	1,624,700	1,027,900	1,827,900	6,866,800	38,075,060	19,591,400	57,666,460
1980	20,378,787	2,668,300	3,297,500	1,221,300	884,700	2,558,400	6,668,700	37,677,687	21,069,900	58,747,587
1981	20,177,701	2,623,000	3,227,000	1,542,000	1,947,000	2,765,000	6,906,000	39,187,701	19,210,000	58,397,701

Source: American Petroleum Institute Data Book.

Estimated Crude Oil Reserves in 20 Leading Nations

Nation	(Add 000 bbl.) Reserves		% of Free World Reserves		% of Total World Reserves	
	1982(a)	1981	1982	1981	1982	1981
1. Saudi Arabia (b)	164,600,000	165,000,000	28.1	29.3	24.5	25.4
2. Kuwait (b)	64,480,000	64,900,000	11.0	11.5	9.6	10.0
3. U.S.S.R.	63,000,000	63,000,000	—	—	9.4	9.7
4. Iran	57,000,000	57,500,000	9.8	10.2	8.5	8.9
5. Mexico	56,990,000	44,000,000	9.7	7.8	8.5	6.8
6. Abu Dhabi	30,600,000	30,000,000	5.2	5.3	4.6	4.6
7. U.S.A.	29,785,000	29,000,000	5.1	5.2	4.4	4.5
8. Iraq	29,700,000	29,805,000	5.1	5.1	4.4	4.4
9. Libya	22,600,000	23,000,000	3.9	4.1	3.4	3.5
10. Venezuela	20,300,000	20,500,000	3.5	—	3.0	3.2
11. China	19,895,000	17,950,000	—	3.2	3.0	2.8
12. Nigeria	16,500,000	16,700,000	2.8	3.0	2.5	2.6
13. United Kingdom	14,800,000	14,800,000	2.5	2.6	2.2	2.3
14. Indonesia	9,800,000	9,500,000	1.7	1.7	1.5	1.5
15. Algeria	8,080,000	8,200,000	1.4	1.5	1.2	1.3
16. Norway	7,620,000	6,400,000	1.3	1.1	1.1	1.0
17. Canada	7,300,000	5,500,000	1.3	1.0	1.1	0.8
18. Qatar	3,434,000	3,585,000	0.6	0.6	0.5	0.6
19. Egypt	2,930,000	3,000,000	0.5	0.5	0.4	0.5
20. Malaysia	2,800,000	2,900,000	0.5	0.5	0.4	0.4
Total Free World	**584,864,150**	**565,629,712**	**100.0%**	**100.0%**	**87.2%**	**86.7%**
Total World	**670,709,150**	**651,929,712**	—	—	**100.0%**	**100.0%**

(a) Preliminary; (b) Saudi Arabia and Kuwait share the production from the Neutral Zone located between the two nations which had reserves of 6,260 mmb in 1981 and 6,500 mmb in 1980. These reserves are not included in the above figures.
Source: American Petroleum Institute Basic Data Book, January, 1983.

Crude Production in 20 Leading Nations

Nation	Production (Add 000 bbl.)				% of Free World Production		% of Total World Production	
	1981		1980					
	Total	b/d	Total	b/d	1981	1980	1981	1980
1. U.S.S.R.	4,303,350	11,790	4,282,200	11,700	—	—	21.1	19.7
2. Saudi Arabia (a)	3,513,125	9,625	3,524,946	9,631	23.1	21.3	17.2	16.2
3. United States	3,128,780	8,572	3,146,502	8,597	20.6	19.0	15.4	14.5
4. Mexico	843,880	2,312	920,124	2,514	5.6	5.6	4.1	4.2
5. Venezuela	769,420	2,108	2,390	2,165	5.1	4.8	3.8	3.6
6. People's Rep. of China	738,760	2,024	775,188	2,118	4.9	—	3.6	3.6
7. United Kingdom	661,015	1,811	753,228	2,058	4.4	4.5	3.2	3.5
8. Indonesia	585,640	1,604	708,942	1,937	3.9	4.3	2.9	3.3
9. United Arab Emirates	547,500	1,500	669,780	1,830	3.6	4.0	2.7	3.1
10. Nigeria	527,425	1,445	622,932	1,702	3.5	3.8	2.6	2.9
11. Iran	504,065	1,381	680,292	1,662	3.3	3.7	2.5	2.8
12. Canada	469,025	1,285	592,554	1,619	3.1	3.6	2.3	2.7
13. Libya	415,005	1,137	576,816	1,576	2.7	3.5	2.0	2.7
14. Iraq	362,445	993	521,184	1,424	2.4	3.1	1.8	2.4
15. Kuwait (a)	345,655	947	508,374	1,389	2.3	3.1	1.7	2.3
16. Algeria	293,095	803	373,320	1,020	1.9	2.3	1.4	1.7
17. Egypt	218,270	598	217,770	595	1.4	1.3	1.1	1.0
18. Norway	182,865	501	199,104	544	1.2	1.2	0.9	0.9
19. Argentina	181,040	496	193,248	528	1.2	1.2	0.9	0.9
20. Brunei-Malaysia	156,585	429	189,588	518	1.0	1.1	0.8	0.8
Total Free World	**15,181,445**	**41,593**	**16,559,304**	**45,244**	**100.0%**	**100.0%**	**74.5%**	**76.1%**
Total World	**20,373,570**	**55,818**	**21,765,654**	**59,469**	—	—	**100.0%**	**100.0%**

(a) Excluding Neutral Zone Production which was 544 mbd in 1980 and 370 mbd in 1981.
Source: American Petroleum Institute Data Book, January, 1983.

Canadian Oil Companies: How

Company	TOTAL BRANDED RETAIL OUTLETS	Number of Provinces where marketed	BRANDED SERVICE STATIONS • Total branded service stations	Supplied directly	Supplied through jobbers & commission agents	Lessee/Dealer operated	Salary operated	Commission operated	100% Full service	100% Self-service	Service and self-service
BP Canada, Inc. (A)	1,640	2	1,640	1,400	240	1,044	—	596	1,381	257	2
Caloil, Inc. (B)	85	2	85	85	—	27	—	58	82	3	—
Chevron Canada Ltd. (B)	331	1	290	162	128	233	—	57	227	60	3
Federated Co-ops Ltd.	724	4	384	384	0	384	0	0	0	116	268
Gulf Canada Ltd. (B)	2,715	10	2,715	—	—	2,551	164	—	2,360	354	1
Husky Oil Ltd.	324	6	253	240	13	253	0	0	222	31	0
Imperial Oil Ltd. (B)	3,719	10	3,719	2,469	1,250	3,216	80	423	3,192	527	—
Irving Oil Ltd. (C)	—	—	—	—	—	—	—	—	—	—	—
Mohawk Oil Co. Ltd. (B)	257	5	257	257	—	191	59	7	204	50	3
Petro-Canada Exploration, Inc. (A)	1,379	11	1,379	1,185	194	1,179	30	138	1,093	276	10
Petrofina Canada, Inc. (B)	932	5	932	932	—	860	36	36	828	104	—
Shell Canada Ltd.	3,512	10	3,512	2,944	1,013	2,931	142	439	2,949	563	—
Spur Oil Ltd.	148	2	148	148	0	99	0	0	136	12	0
Sunoco, Inc.	872	3	872	872	0	662	201	9	662	210	0
Texaco Canada, Ltd.	2,769	10	2,769	2,769	0	2,256	0	513	2,256	507	6
Turbo Resources Ltd. (B)	304	5	293	218	63	187	1	83	294	10	—
Top Value Gasmarts	148	2	148	148	0	71	15	62	4	144	0
Ultramar Canada, Inc.	842	3	842	842	—	808	34	—	824	10	8

(A) BP Canada and Petro-Canada were merged on March 1, 1983; These data are for the calendar year ending Dec. 31, 1982; (B) Most recent information available; questionnaires were not returned or were incomplete; (C) Irving refuses to disclose any of its operating details

Source: NPN questionnaires and 1982 Factbook.

Brand Names of Gasoline and Motor Oil

BP Canada, Inc. (A)

Gasolines	Motor Oils
BP Regular (r)	BP Autogol
BP No-Lead (xr)	BP Vanellus MCS3
BP Super No-Lead (xp)	BP Energol H.D.
	BP Vanellus C-3 Extra
	BP Extra Duty Motor Oil
	BP Super Engine Oil

Caloil Inc. (B)

Gasolines	Motor Oils
Calex (r)	
Calex Unleaded (xr&xp)	

Chevron Canada Ltd. (B)

Gasolines	Motor Oils
Chevron Regular (r&xr)	Chevron Special
Chevron Premium (p)	Chevron Supreme
Chevron Supreme (xp)	Chevron Custom
	Chevron Delo

Federated Co-Ops Ltd.

Gasolines	Motor Oils
Sonic (r&p) (xr)	HD 7
	D-MO
	Sonic Premium
	Multrex

Gulf Canada Ltd. (B)

Gasolines	Motor Oils
Gulf (r, xsp)	Gulf Premium Multigrade
	Super Premium Multigrade

Husky Oil Ltd.

Gasolines	Motor Oils
Husky (r)	Husky Super Duty
Husky (x)	Husky Heavy Duty
Husky (r, xr)	Husky HD Special
	Husky Stratolube
	Strato Plus

Imperial Oil Ltd. (B)

Gasolines	Motor Oils
Esso (r)	Essolube HD
Esso 2000 (xr)	Essolube HD X Plus
Esso Extra Unleaded (xp)	Essolube HD 3
	Esso Plus
	Esso Extra
	Uniflo

Mohawk Oil Co. Ltd. (B)

Gasolines	Motor Oils
Mohawk (r) (xr&xp)	Mohawk Premium
	Mohawk S. Duty
	Mohawk MultiGrade 10/30
	ATF Dextron
	Outboard Motor Oil

Murphy Oil Co. Ltd. (B)

Gasolines	Motor Oils
Spur (r) (xr&xp)	Spur Supreme
Gas (r) (xr&xp)	Spur HD
	Spur Regular
	Spur A.T.F.
	Spur 2 Stroke

Petro-Canada Exploration (A)

Gasolines	Motor Oils
Pacific 66 (r, xr&xp)	Dieseltonic
	Heavy Duty Commercial
	Heavy Duty Motor Oil
	Universal Motor Oil
	Multi-Motor Oil
	Multi-Plus
	DN-600 Fluid

Petrofina Canada Inc. (B)

Gasolines	Motor Oils
Fina Regular (r)	Regular M.O. Single Grade
Fina Lead-Free (xr)	Dieseltonic H.D. 30
Fina Super 100 Lead-Free (xp)	Universal MG 15W40
	Heavy Duty 10W 20-20W, 30, 40
	Multi 10W30
	Multi-Plus 5W30-10W40

Shell Canada Ltd.

Gasolines	Motor Oils
Shell (r)	Shell X-100
Shell Ultra (xp)	Shell Super Plus
Shell Super Non-leaded (xsp)	Shell Super Plus Arctic

Spur Oil Ltd.

Gasolines	Motor Oils
Spur (r, xr, xp)	Castrol Distributorship
Gas (r, xr, xp) †	Spur Supreme

Sunoco Inc.

Gasolines	Motor Oils
Sunoco 200 (r)	Dynalube, Pronto
Sunoco Leaded Blend (p)	Dieselube, Sunfleet
	Special
Sunoco Reg. Unleaded (xr)	Cam 2
Sunoco Premium Unleaded (xp)	
Sunoco ½+½ Unleaded (other)	
Pronto (r, xr, xp) †	

Texaco Canada Ltd.

Gasolines	Motor Oils
Fire Chief (r)	URSA E-D (various)
Lead-free Texaco (x)	URSA Super Plus
Sky Chief Lead Free (xsp)	Havoline
	URSA Premium SAE 15W-40
	Havoline Supreme SAE 10W-40, 5W-30
	URSA Super Flow 0W-30

Top Value Gasmarts

Gasolines	Motor Oils
Top Valu (r)	Burmak
Top Valu (rx)	Burmak
Top Valu (px)	Veedol
Payless (r +)	Castrol
Payless (r + x)	

Turbo Resources Ltd. (B)

Gasolines	Motor Oils
Turbo (x)	Turbo HD 1
Turbo No-lead (xr&xp)	Turbo SD 1
Turbo (px)	Turbo Multi-Service
	Turbo Supreme

Ultramar Canada Inc. (B)

Gasolines	Motor Oils
Ultramar (r&p)(xr&xp)	Ultralube
Ultramar (xsp)	Ultralube Monograde HD
XL (r, xr&xp)	Ultralube Super Multigrade
Arrow (r, xr&xp)	

(A) BP Canada, Inc., was acquired and merged into Petro-Canada Exploration, Inc., as of March 1, 1983. The data for BP and Petro-Canada are as of Dec. 31, 1982; (B) Latest information available. Questionnaires either were not returned or were incomplete.

Key
Gasoline
(r) Regular
(p) Premium
(sp) Super premium
(x) Unleaded

Motor oil . . . Brand names are listed with lowest price grade first

Distribution Is Organized

BRANDED JOBBERS				COMMISSION AGENTS				BULK PLANTS				TERMINALS			
SELLING . . .				SELLING . . .				COMPANY OPERATED				COMPANY OPERATED			
Total	Gasoline only	Fuel Oil only	Gasoline and fuel oil	Total	Gasoline only	Fuel oil only	Gasoline and Fuel oil	Total	Salary operated	Commission operated	Jobber operated	Total	Salary operated	Commission operated	Jobber operated
3	—	1	2	142	0	1	142	89	1	88	2	6	6	—	—
37	37	—	—	—	—	—	—	3	1	2	4	1	1	—	—
1	—	—	1	49	—	—	49	49	—	49	—	2	2	—	—
—	—	—	—	—	—	—	—	340	340	0	—	—	—	—	—
243	—	—	—	268	—	—	—	104	85	19	268	1	1	—	—
32	0	0	32	—	—	—	—	—	—	—	—	1	1	0	—
0	—	—	—	692	—	2	690	665	—	665	—	63	56	7	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	7	7	—	—	3	—	—	5	—	—	—	—
49	14	8	27	208	72	—	136	138	20	118	8	13	13	—	—
—	—	—	—	123	—	—	123	23	22	11	—	12	12	—	—
273	0	13	260	439 +	439	0	0	222	37	185	240	16	16	0	—
0	0	0	0	0	0	0	0	2	0	2	5	3	3	0	0
0	0	0	0	9	9	0	0	20	20	0	NA	7	7	0	NA
0	0	0	0	513	513	0	0	286	47	249	—	33	33	0	—
12	—	—	12	14	—	—	14	20	—	8	12	1	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	67	—	—	67	84	84	—	—	47	47	—	—

Branded Retail Outlets in Canada

Company	Total	No. of Provinces	Newfoundland	Nova Scotia	New Brunswick	Quebec	Ontario	Prince Edward Island	Manitoba	Saskatchewan	Alberta	British Columbia
BP Canada, Inc. (A)	1,640	2	—	—	—	633	1,007	—	—	—	—	—
Caloil, Inc. (B)	85	2	—	—	—	78	7	—	—	—	—	—
Chevron Canada Ltd. (B)	331	1	—	—	—	—	—	—	—	—	—	331
Federated Co-ops, Ltd.	724	4	—	—	—	—	—	—	132	427	91	24
Gulf Canada, Ltd. (B)	2,719	10	70	76	60	547	630	6	248	338	425	289
Husky Oil, Ltd. (C)	324	6	—	—	—	—	61	—	38	31	102	89
Imperial Oil, Ltd. (B)	3,719	10	192	203	175	759	867	45	267	357	389	465
Irving Oil, Ltd. (D)	—	—	—	—	—	—	—	—	—	—	—	—
Mohawk Oil Co., Ltd. (B)	257	5	—	—	—	—	5	—	16	16	140	80
Murphy Oil Co., Ltd. (B)	240	2	—	—	—	150	90	—	—	—	—	—
Petro Canada Explorations, Inc. (A)	1,379	11	—	136	91	423	321	13	33	44	116	196
Petrofina Canada, Ltd. (B)	932	5	—	129	87	403	302	11	—	—	—	—
Shell Canada, Ltd. (E)	3,512	10	—	119	131	844	1,236	30	310	209	287	341
Spur Oil Co., Ltd.	148	2	—	—	—	142	6	—	—	—	—	—
Sunoco, Ltd.	872	3	—	—	—	330	540	—	—	—	2	—
Texaco Canada, Ltd.	2,769	10	40	135	145	777	982	27	117	137	214	195
Turbo Resources, Ltd. (B)	304	5	—	—	—	—	81	—	15	14	112	29
Top-Valu Gasmarts	148	2	—	—	—	27	121	—	—	—	—	—
Ultramar Canada, Inc. (B)	842	3	185	—	—	420	237	—	—	—	—	—

(A) BP Canada was acquired by Petro-Canada and merged into it on March 1, 1983; These data are for the calendar year ended Dec. 31, 1982; (B) Most recent information available; questionnaires either were not answered or were incomplete; (C) Husky has 3 stations in the Yukon; (D) Irving refuses to disclose any of its operating details; (E) Shell has 5 stations in North West Territories.

Source: NPN questionnaires and 1982 Factbook.

Canadian Statistics

Canadian Motor Vehicle Registrations 1981

Province	Passenger Cars	Trucks	Buses	Motorcycles	Others	Total Vehicles	Trailers
Newfoundland	141,607	62,311	NA	5,564	NA	209,482	23,767
Prince Edward Island	48,564	17,402	424	1,801	205	63,396	7,073
Nova Scotia	350,407	143,018	1,447	19,750	1,067	515,689	49,698
New Brunswick	251,511	91,189	495	10,778	11,978	365,951	55,935
Quebec	2,378,851	320,815	16,944	131,020	31,197	2,878,827	295,271
Ontario	3,831,058	1,089,855	22,486	107,227	7,175	5,057,801	626,030
Manitoba	460,501	184,338	148	16,678	742	662,407	98,783
Saskatchewan	391,743	282,646	4,655	12,363	616	692,023	98,096
Alberta	1,216,340	469,432	7,506	55,640	NA	1,748,918	240,230
British Columbia	1,115,959	456,206	NA	44,449	NA	1,616,614	192,832
Yukon	6,702	10,837	NA	580	NA	18,119	4,091
Northwest Territories	6,145	9,938	105	1,021	46	17,255	2,594
Total	**10,199,388**	**3,137,987**	**54,210**	**406,871**	**53,026**	**13,851,482**	**1,694,400**

Source: Canadian Statistics, 1982.

New Motor Vehicle Sales

Year	Passenger Cars	Trucks & Buses	Total
1982	713,481	207,421	920,902
1981	904,195	286,687	1,190,882
1980	932,060	331,747	1,263,807
1979	1,003,008	393,394	1,396,402
1978	988,890	377,645	1,366,544
1977	991,398	353,561	1,344,959
1976	946,488	344,975	1,291,463

Source: Statistics Canada.

Automobiles Per Household (1982)

Province	Households (add 000)			
	1 Car	2 Cars	3 or More	Without
Newfoundland	76	27	4	41
Prince Edward Island	20	8	—	6
Nova Scotia	144	51	10	58
New Brunswick	113	41	10	42
Quebec	1,268	351	59	512
Ontario	1,514	727	165	597
Manitoba	185	74	19	75
Saskatchewan	164	91	23	49
Alberta	337	234	76	100
British Columbia	500	247	70	164
Total	**4,321**	**1,851**	**438**	**1,644**

Factory Sales of Car Batteries

	1982	Dollar Value	1981	Dollar Value
Original Equipment	confid.	...	846,253	...
Replacement	3,023,971	$109,013,649	2,764,319	$93,383,472

Factory Tires

	1980		1979	
	Units	Dollar Value (Add 000)	Units	Dollar Value (Add 000)
Passenger Cars Belted Bias	3,978,195	$108,644	5,509,920	$129,750
Passenger Cars N.E.S.	1,489,211	32,664	2,544,952	59,030
Light Trucks N.E.S.	1,434,584	74,009	1,896,221	78,987
Buses & Heavy Trucks	809,576	109,090	960,840	109,498
Farm Tractors/ Implements	575,705	55,764	600,874	52,674
Off-Highway N.E.S.	62,866	53,059	113,103	66,102
Total	**8,350,137**	**$433,230**	**11,625,910**	**$417,054**

N.E.S. = Not elsewhere specified.
Source: Statistics Canada.

Drivers Licenses 1981

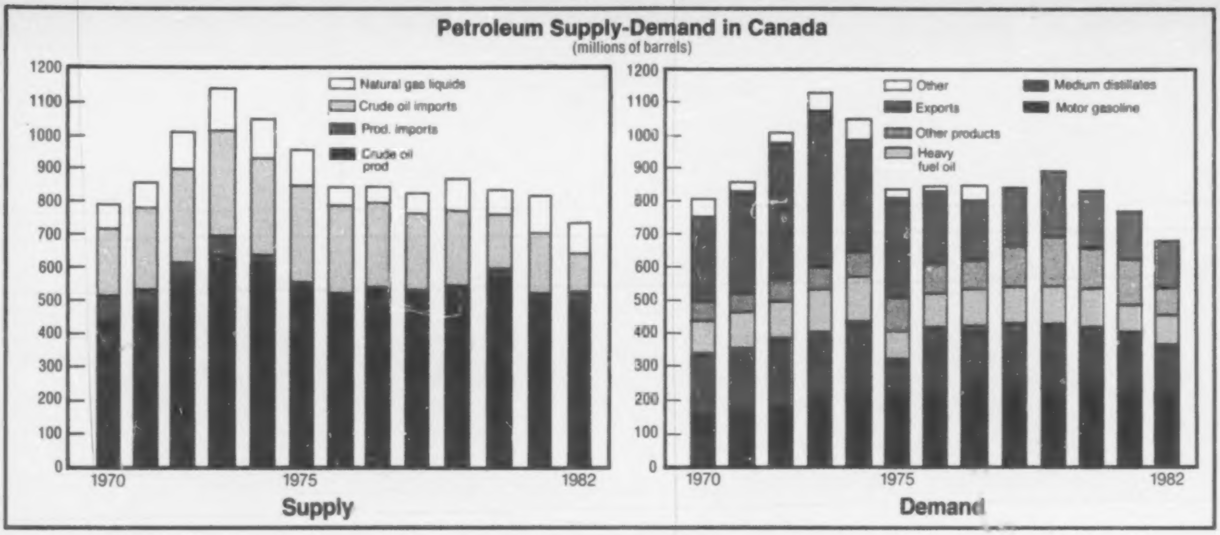
Newfoundland	252,628
Prince Edward Island	27,536
Nova Scotia	485,446
New Brunswick	370,506
Quebec	3,413,970
Ontario	5,123,177
Manitoba	572,095
Saskatchewan	583,049
Alberta	1,608,479
British Columbia	2,031,393
Yukon	not available
Northwest Territories	17,999
Total	**14,486,278**

Source: Statistics Canada.

Principal Heating Fuel 1982

	Households (Add 000)						
	Oil	Piped Gas	Bottled Gas	Electricity	Coal Coke	Wood	Total Households
Newfoundland	68	(a)	(a)	43	(a)	26	130
Prince Edward Island	28	(a)	(a)	(a)	(a)	7	31
Nova Scotia	196	(a)	(a)	16	5	34	203
New Brunswick	119	(a)	(a)	33	(a)	44	166
Quebec	986	170	—	471	(a)	69	1,068
Ontario	830	1,610	16	243	(a)	96	2,111
Manitoba	39	216	(a)	52	(a)	9	274
Saskatchewan	49	254	8	8	(a)	—	276
Alberta	11	713	10	(a)	9	(a)	584
British Columbia	204	563	7	92	4	52	692
Total	**2,530**	**3,527**	**53**	**960**	**12**	**344**	**5,534**

(a) Too small.
Source: Statistics Canada.


Petroleum Supply-Demand in Canada
(millions of barrels)

Refined Product Sales in 1982

Refined product sales in Canada totaled 682.2-million bbl. in 1982, down 11.5% from 1981 which, in turn, was down 7.8% from the 1980 total of 835.9-million bbl. Principal demand figures (see chart above) were gasoline, 215.8-million bbl.; medium distillates, 158.6-million bbl.; heavy oil, 66.0-million bbl.; other products, 90.5-million bbl.; and exports, 151.4-million bbl.

Principal supply figures were crude production, 498.8-million bbl.; product imports, 16.2-million bbl.; crude oil imports, 123.7-million bbl., and natural gas liquids production, 98.1-million bbl. Pentanes, included in NGL production, were 35.4-million bbl.

(Cubic Meters) (a)

	Aviation Gasoline	Motor Gasoline	Aviation Turbine Fuel	Kerosene & Stove Oil	Diesel Fuel Oil	Light Fuel Oil	Heavy Fuel Oil	Lubes & Greases
Newfoundland	3,641	588,137	211,413	61,606	412,143	398,122	382,312	12,806
Prince Edward Island	2,804	168,219	7,105	16,849	50,773	122,529	29,071	2,370
Nova Scotia	2,159	1,162,887	147,241	85,780	565,089	855,035	1,123,806	25,351
New Brunswick	3,459	958,719	57,930	58,031	337,539	564,482	1,580,359	19,036
Quebec	22,019	7,086,746	744,857	285,990	2,149,897	4,024,716	4,311,779	146,493
Ontario	40,584	11,982,596	1,214,372	200,568	3,237,253	3,392,297	1,476,162	358,328
Manitoba	21,240	1,500,169	190,568	96,562	725,988	117,984	175,636	32,823
Saskatchewan	11,816	1,905,017	91,537	141,715	1,038,701	164,685	17,049	49,622
Alberta	29,386	4,813,003	754,812	63,319	2,626,626	98,820	27,493	130,629
British Columbia	30,150	4,034,841	543,624	110,476	2,174,918	585,324	1,337,539	100,073
Yukon	4,348	46,809	7,185	35,762	28.748	57,424	—	1,622
Northwest Territories	8,634	44,593	89,100	50,726	203,293	60,145	20,762	3,236
Total 1982	**180,240**	**34,291,736**	**4,059,744**	**1,207,384**	**13,550,968**	**10,441,563**	**10,481,968**	**882,389**
Total 1981	**221,437**	**37,230,575**	**4,464,748**	**1,219,091**	**14,739,845**	**11,414,360**	**15,621,291**	**1,034,776**

(a) To translate into imperial bbl., divide cubic meters in each case by 158.9; an imperial bbl. equals 35 imperial gal.; an imperial gal. equals 1.2 U.S. gal.
Source: Statistics Canada.

Gasoline Sales and Premium Ratios

	(1977) (a)	(Add 000)	
Metropolitan Areas	Outlets	Gasoline Sales (gal.)	Population (b)
Montreal	1,575	659,744	2,798
Toronto/Hamilton	1,549	709,342	2,741
Regina	82	50,965	520
Calgary	226	156,591	151
Ottawa/Hull	297	169,241	444
Winnipeg	251	146,793	626
Edmonton	234	171,545	570
Vancouver	447	283,725	529
Total	**4,660**	**2,347,946**	**9,516**

(a) These are the most recent figures available; (b) As of June 1974, most recent data available.
Source: Statistics Canada.

	Premium (a)	
Province	December 1982	December 1981
Alberta and Northwest Territories	5.9%	7.1%
British Columbia and Yukon	9.7	10.3
Manitoba	3.5	4.0
Maritimes	8.8	10.4
Newfoundland	6.1	6.8
Ontario	11.4	12.5
Quebec	16.2	18.8
Saskatchewan	2.9	3.2
Total Canada	**10.6%**	**11.9%**

(a) Contains leaded and unleaded premium.
Source: Ethyl Corp., Petroleum Chemicals Div.

LP-Gas Sales Flatten Out in '81

Only a small increase in propane consumption by internal combustion engines kept the 1981 sales pattern for LP-Gas from being a complete washout. Propane sales were up 7.8% but since the volume isn't all that great in relation to other LP-G uses, they were interesting but not necessarily exciting or trendworthy. Total LP-G sales in 1981 were just over 18-billion gal., down 2.9% from the preceding year, which, in turn, had been under 1979's total by 3.1%.

LPG Sales Trend

Major Domestic Markets
(Add 000,000 gal.)

	Total U.S. sales		Residential-commercial		Chemical		Internal combustion		Industrial		All other uses	
Year	Vol.	% Change	Vol.	% Change	Vol.	% Change	Vol.	% Change	Vol.	% Change	Vol.	% Change
1981 (a)	18,061	−2.9	4,232	−3.2	7,680	−1.6	551	7.8	2,096	−5.5	3,503	−5.3
1980 (a)	18,604	−3.1	4,373	−8.2	7,808	−4.3	508	14.4	2,217	5.3	3,698	−1.0
1979 (a)	19,202	27.8	4,764	−31.5	8,160	129.0	444	−55.3	2,105	57.1	3,728	71.6
1978	15,023	−3.1	6,954	−3.0	3,563	−0.4	993	−13.3	1,340	28.4	2,172	−15.6
1977	15,508	−3.2	7,169	−2.0	3,578	−12.4	1,145	−2.1	1,044	—	2,573	7.5
1976	16,013	5.3	7,313	4.2	4,085	−2.1	1,170	—	1,052	−2.8	2,394	35.8
1975	15,200	−6.8	7,020	−2.9	4,172	−23.0	1,162	−11.3	1,082	1.2	1,763	38.3
1974	16,306	−5.0	7,231	−7.8	5,422	−9.0	1,310	−7.0	1,069	2.4	1,275	46.2
1973	17,812	−1.1	7,846	−5.0	5,960	1.0	1,409	−4.7	1,095	−2.3	872	41.1
1972	17,373	12.1	8,253	7.6	5,898	15.1	1,479	11.7	1,124	23.7	618	30.7
1971	15,498	1.5	7,668	1.3	5,124	2.4	1,324	—	909	1.3	473	1.3
1970	15,271	26.6	7,569	41.6	5,003	24.8	1,336	11.9	897	32.1	467	125.6
1965	11,434	33.7	5,346	26.5	4,008	54.6	1,194	33.0	679	13.9	207	−23.0
1960	8,579	40.1	4,225	50.8	2,593	36.5	898	37.7	596	13.7	269	9.3
1955	6,123	75.8	2,801	38.5	1,899	122.6	652	401.5	524	241.6	246	−7.7
1950	3,433	—	2,022	—	853	—	130	—	217	—	260	—

(a) This data is not comparable to the pre-1979 data appearing above.
Source: Sales of LPG and Ethane in 1981, Petroleum Supply Annual, Department of Energy, July, 1982.

McGill
INCORPORATED

Gasoline Vapor Recovery Units

McGill Adsorption/Absorption vapor recovery systems are available in thirteen different models, each with standard modifications available to fit your particular needs. Developed and patented by McGill, the Adsorption/Absorption technique is the simplest and most economical system available today. Other light hydrocarbon vapor recovery systems are also available.

Gasoline Vapor Disposal Units

McGill vapor disposal units provide optimum safety, maximum emission reduction and meet all EPA requirements for the disposal of gasoline vapors displaced during loading. Loading rates from 300 GPM to 70,000 GPM are easily handled. Vapor disposal units for benzene or other hydrocarbons are also available.

McGILL INCORPORATED

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THE TECHNOLOGY PEOPLE

Sales of Liquid Petroleum Gases, by Use

	Residential and Commercial		Internal Combustion Engine Fuel		Chemical and Industrial		Total (a)	
P.A.D. District and State	**1981**	**1980**	**1981**	**1980**	**1981**	**1980**	**1981**	**1980**
District 1								
Connecticut	29,214	29,421	1,641	1,628	12,089	14,979	51,946	51,909
Delaware	22,400	18,514	W	1,532	6,160	W	33,964	110,647
Florida	233,281	219,085	19,664	17,775	101,597	W	385,932	370,742
Georgia	165,353	W	13,264	8,376	20,838	W	265,529	257,479
Maine	17,049	19,535	W	1,013	8,425	W	27,778	30,227
Maryland and District of Columbia	45,119	W	W	2,928	W	13,461	78,531	71,405
Massachusetts	35,226	33,349	3,625	2,918	8,367	W	98,408	73,516
New Hampshire	28,960	29,072	631	W	5,694	6,441	42,463	44,278
New Jersey	46,731	38,391	12,630	W	270,755	W	338,643	255,369
New York	131,813	W	9,977	8,706	45,940	W	202,786	194,784
North Carolina	137,573	140,625	8,726	5,564	30,663	W	292,940	276,006
Pennsylvania	90,290	W	14,672	16,272	167,839	W	298,663	250,951
Rhode Island	5,991	5,672	W	982	2,488	2,349	10,796	10,146
South Carolina	77,126	74,608	4,371	3,676	7,656	W	108,716	W
Vermont	18,816	17,590	W	256	W	2,284	24,324	23,039
Virginia	68,944	74,421	6,184	5,218	14,789	W	114,763	W
West Virginia	19,470	19,540	2,023	1,566	104,019	W	126,339	118,809
Total	**1,173,376**	**1,134,575**	**104,915**	**90,941**	**825,401**	**771,756**	**2,502,521**	**2,357,531**
District 2								
Illinois	209,041	200,178	22,858	19,648	648,550	W	1,336,804	1,342,506
Indiana	162,859	165,596	W	9,689	51,774	W	281,985	275,369
Iowa	177,950	192,202	W	3,791	69,402	W	384,621	386,291
Kansas	80,852	102,908	14,972	12,201	122,194	W	290,308	290,718
Kentucky	92,446	101,919	W	W	203,842	232,349	308,135	353,619
Michigan	146,298	166,749	W	14,181	22,100	16,922	216,690	232,994
Minnesota	131,737	144,727	9,348	7,466	21,993	W	231,629	266,239
Missouri	229,979	W	W	7,483	14,703	16,825	286,409	315,519
Nebraska	64,805	W	13,124	W	4,851	W	156,456	155,631
North Dakota	32,268	25,238	7,535	1,272	W	5,271	56,441	45,046
Ohio	137,388	126,312	W	24,901	281,963	W	1,568,279	1,531,116
Oklahoma	93,338	86,909	20,793	26,007	66,643	73,901	278,127	310,884
South Dakota	45,803	57,584	3,410	7,614	W	931	69,192	87,508
Tennessee	37,922	W	5,647	6,702	8,465	W	58,914	96,391
Wisconsin	133,640	147,380	11,972	9,249	10,078	15,847	191,773	208,808
Total	**1,776,326**	**1,907,925**	**182,144**	**170,494**	**1,532,573**	**1,388,543**	**5,715,763**	**5,898,639**
District 3								
Alabama	134,227	W	8,257	5,136	W	9,141	179,477	171,182
Arkansas	[illegible],923	W	13,587	W	W	15,676	146,331	167,662
Louisiana	56,627	56,691	W	W	2,290,819	W	2,367,374	1,828,889
Mississippi	103,297	108,753	W	16,819	24,959	W	176,356	196,949
New Mexico	40,534	59,728	7,831	W	54,560	48,241	121,314	162,936
Texas	308,587	302,961	82,767	W	4,650,751	5,656,217	5,576,297	6,565,445
Total	**729,195**	**761,890**	**137,197**	**136,083**	**7,041,738**	**7,504,558**	**8,567,149**	**9,093,063**
District 4								
Colorado	103,295	W	6,511	W	13,099	15,649	146,507	133,872
Idaho	14,509	15,612	W	2,572	3,952	4,283	34,268	34,365
Montana	24,878	40,948	3,278	W	1,880	W	39,930	62,488
Utah	18,972	17,241	W	1,599	10,835	W	60,104	44,998
Wyoming	35,547	31,818	7,400	8,095	11,708	W	78,850	70,215
Total	**197,201**	**W**	**23,410**	**W**	**41,474**	**32,715**	**359,659**	**345,938**
District 5								
Alaska	W	W	—	W	2,428	W	5,900	6,602
Arizona	31,308	32,443	9,149	8,630	W	3,524	49,563	54,967
California	217,631	243,074	67,749	57,711	298,804	W	666,488	664,045
Hawaii	W	W	W	W	W	W	51,993	54,400
Nevada	19,950	21,104	W	W	2,408	2,176	32,488	30,446
Oregon	31,078	28,339	8,782	7,158	W	W	48,966	46,821
Washington	33,584	30,952	13,147	10,135	6,850	W	60,850	51,430
Total	**355,638**	**W**	**103,058**	**W**	**334,726**	**327,794**	**916,248**	**908,711**
U.S. Total	**4,231,736**	**4,372,576**	**550,721**	**508,011**	**9,775,912**	**10,025,366**	**18,061,340**	**18,603,882**

(W) Data withheld to avoid disclosing individual company data; (a) Total includes gas utility and miscellaneous uses.
Source: Petroleum Supply Annual, 1981, Department of Energy, July, 1982.

Motor Oil Outlook: A New Review

Do-it-yourselfers and mass merchandisers are increasing their domination of the motor oil market, according to NPD Research, Inc., of Port Washington, N.Y., the ninth largest market research company in the U.S.

As indicated in the tables at the right, do-it-yourselfers now account for about 70% of motor oil purchases. At the same time, the traditional service station role has eroded from 26% only four years ago to a little less than 21% in 1982.

Mass merchandisers enhanced their standing as distributors of motor oil by four percentage points so that as of 1982, six out of 10 purchases of motor oil were made in discount stores, department stores, supermarkets, drug stores and other non-traditional outlets.

Prices unquestionably were the key factors in the growth of the mass merchandiser. In 1982, for example, discounters sold motor oil for an average of $1 a quart. Service stations charged an average $1.59 and the other traditional dispensers, like car dealers and auto supply stores, sold theirs for $1.36 a quart.

Again, an economic key: Motor oil prices increased only 2¢ a quart at the mass merchandisers in 1982 versus 1981. But they went up an average of 11¢ a quart at service stations. The industry average rose from $1.17 in 1981 to $1.22 in 1982.

NPD Research also showed that the annual quarts purchased by the average vehicle-operating family declined from 19.0 quarts in 1979 to 13.6 quarts in 1982. Although no explanation was offered, it could be assumed that the decreased consumption related to the lower rate of travel by motorists and their gasoline consumption.

The Market Share Battle

Retail Segment	Avg. Retail Price 1982	Avg. Retail Price 1981	Primary Market	Market Shares 1982	Market Shares 1981
Mass Merchandisers (discount stores, department stores, supermarkets, drug stores and others)	$1.00	$0.98	DIY (a)	59%	57%
Service Stations	1.59	1.48	Reliers (b)	21	23
Other Traditional Outlets (car dealers, auto supply stores, garages and tire stores)	1.36	1.23	Reliers & DIY	20	19
Total Industry	**$1.22**	**$1.17**			

(a) Do-it-yourselfers accounted for 71% of the motor oil purchases in 1982; (b) Motorists who rely on service stations, car dealers, etc., to change their oil.

The Channels of Distribution (a)

	1982	1981	1980	1979
Service Stations	20.8%	23.4%	25.7%	26.0%
Discount Stores	30.1	29.2	29.3	31.4
Department Stores	10.0	7.6	8.2	8.1
Supermarket/Drug Stores	9.2	9.3	8.6	5.8
Others	10.1	11.3	10.1	10.6
Auto Supply Stores	9.8	10.5	9.7	10.3
Tire Store/Garages	5.2	4.3	5.3	5.2
Car Dealers	4.8	4.4	3.1	2.6

(a) By quarts by place of purchase.

How the Oil Is Used

	1982	1981	1980	1979
Oil Change	48%	46%	45%	42%
Add Oil	18	20	20	19
Future Use	13	14	16	18
Duplicate Use	21	20	19	21

Who Buys the Most of It

	1982	1981	1980	1979
Carried Out by Purchaser (installed at some other place) (a)	71%	70%	69%	72%
Installed Where Bought (b)	29	30	31	28

(a) Generally considered to be the do-it-yourselfer; (b) generally considered to be the "relier," i.e., depending on service man for performance.

Purchases by Weight of Motor Oil (a)

	1982	1981	1980	1979
10W-30	20%	20%	23%	26%
10W-40	50	47	51	50
20W-50	3	3	2	2
30W	13	14	14	13
Longlife/Friction Reducing	7	8	(b)	(b)
Other	7	8	10	9

(a) Excludes not reported; (b) Data not collected.

Dollars Spent per Average Family

	1982	1981	1980	1979
Dollars Spent (a)	$16.56	$17.10	$16.91	$16.69
Average Price Paid per Quart	1.22	1.17	1.08	0.88
Average Quarts per Transaction	4.10	4.10	4.40	4.60
Annual Quarts Purchased	13.60	14.70	15.70	19.00

(a) Per vehicle operating family.

Source: The Petroleum Marketing Index (NPD Research, Inc.), April, 1983.

Lube Oil Sales Projections

U.S. Demand for Automotive Lube Base Oils

Year	(Add 000,000)				
	Engine Oils	Hydraulic Fluids	Other Lubes	Total (gal.)	Total (bbl.)
1990	898	183	45	1,126	26.8
1985	908	170	43	1,121	26.7
1982	860	161	43	1,063	25.3
1981	905	165	44	1,114	26.5
1980	912	190	47	1,149	27.4
1979	1,032	224	54	1,310	31.2
1978	981	220	52	1,253	29.8
1977	906	205	90	1,201	28.6
1976	884	200	88	1,172	27.9

Source: Robert G. Stewart, Sun Refining and Marketing Co., January, 1983.

U.S. Demand for Lubricating Base Oils

Year	(Add 000,000)				
	Total	Automotive Lubes	Industrial Lubes	Process Oils	Losses/ Minor Prod.
1990	59.9	26.8	20.1	8.9	4.1
1985	56.8	26.7	18.8	7.7	3.6
1982	51.1	25.3	15.9	6.5	3.4
1981	55.8	26.5	18.6	7.1	3.6
1980	54.4	27.4	19.0	8.0	—
1979	61.4	31.2	21.4	8.8	—
1978	58.8	29.8	20.6	8.4	—
1977	57.1	28.6	21.1	7.4	—
1976	55.3	26.2	20.5	8.6	—

Source: Robert G. Stewart, Sun Refining and Marketing Co., January, 1983.

Past and Projected Demand for Finished Lubes

Automotive Oils	(Millions of gal.)				
	1981	1982	1983	1985	1990
On-Road Engine Oil	805	773	794	811	772
Off-Road Engine Oil	235	215	223	233	260
Hydraulic Oil	190	185	187	196	210
Gear Oil	50	47	49	50	53
Total	**1,280**	**1,220**	**1,253**	**1,290**	**1,295**

Industrial Oils	(Millions of gal.)				
	1981	1982	1983	1985	1990
General Lubes	475	418	432	494	525
Metalworking Oil	190	152	157	190	200
Industrial Engine Oil	152	137	144	152	163
Process Oil	310	281	297	330	385
Total	**1,127**	**988**	**1,030**	**1,166**	**1,273**

Source: Robert G. Stewart, Sun Refining and Marketing Co., January, 1983.

Automotive Sales

	(Add 000 gal.)	
	1981	1980
SAE J-193a, Engine Oils		
Monograded	478,242	522,212
Multi-graded	496,116	479,560
Sub Total	**974,358**	**1,001,772**
Non SAE J-183a, Engine Oils		
Aircraft	11,523	11,324
Gasoline Fueled Two-stroke	11,935	13,105
Sub Total	**23,458**	**24,429**
Transmission and Hydraulic Fluids		
Automatic Trans. Fluids	125,701	133,064
Universal Tractor Fluids	39,918	41,916
Shock Absorber/Steering Fluid	8,944	7,750
Other (Manual Trans., etc.)	3,883	7,001
Sub Total	**178,446**	**189,731**
Gear Lubricants		
GL-4 Less	7,202	5,983
GL-5 and GL-6	40,470	42,892
Sub Total	**47,672**	**48,875**
Total Automotive Sales	**1,223,934**	**1,265,216**

Source: National Petroleum Refiners Assn., "1982 Report on U.S. Lubricating Oil Sales."

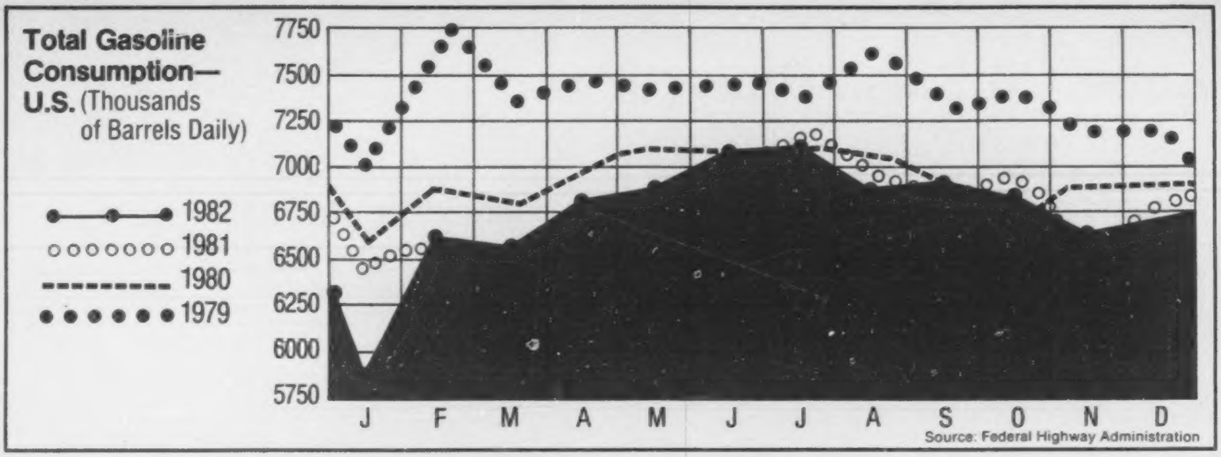
Industrial Sales

	(Add 000 gal.)	
	1981	1980
General Industrial Lubricants		
Hydraulic Oils	212,932	214,055
Gear Oils	38,775	41,099
Other Specified	153,058	162,523
Other Unspecified	3,201	2,134
Sub Total	**407,966**	**419,811**
Industrial Engine Oils		
Railroad Diesel	58,368	61,271
Marine	51,269	54,560
Natural Gas	42,361	41,209
Sub Total	**151,998**	**157,040**
Metalworking		
Specified	87,268	86,973
Unspecified	2,034	3,828
Sub Total	**89,302**	**90,801**
Process Oils		
Specified	287,950	284,780

Source: National Petroleum Refiners Assn., "1982 Report on U.S. Lubricating Oil Sales."

	(Add 000 gal.)		
	1981	1980	1979
Total Industrial Lube Sales	937,216	958,849	1,043,524
Total Automotive Lube Sales	1,223,934	1,265,216	1,391,418
GRAND TOTAL	2,161,150	2,224,065	2,434,942

Source: National Petroleum Refiners Assn., "1982 Report on U.S. Lubricating Oil Sales."


Total Gasoline Consumption—U.S. (Thousands of Barrels Daily)

Source: Federal Highway Administration

Gasoline Consumption by States

(Includes consumption on-highway, off-highway and other uses.)

	1982 Rank	(Add 000 gal.) 1982 (a)	(Add 000 gal.) 1981 (b)	% Chng. '82 vs. '81
Alabama	23	1,828,876	1,849,225	−1.1
Alaska	50	235,112	212,804	10.5
Arizona	28	1,341,613	1,344,438	−0.2
Arkansas	33	1,123,466	1,137,998	−1.3
California	1	10,660,534	10,842,862	−1.7
Colorado	26	1,508,950	1,506,429	0.2
Connecticut	29	1,284,966	1,296,048	−0.9
Delaware	48	282,463	290,581	−2.8
District of Columbia	51	165,653	171,082	−3.2
Florida	4	4,900,102	4,845,057	−1.1
Georgia	11	2,818,366	2,809,969	0.3
Hawaii	47	349,098	347,848	0.4
Idaho	40	458,513	471,054	−2.7
Illinois	5	4,522,361	4,598,012	−1.6
Indiana	14	2,419,331	2,616,773	−7.5
Iowa	27	1,420,298	1,474,522	−3.7
Kansas	30	1,234,055	1,268,857	−2.7
Kentucky	24	1,717,556	1,734,083	−1.0
Louisiana	17	2,145,094	2,103,397	2.0
Maine	38	505,620	497,749	1.6
Maryland	21	1,888,873	1,919,423	−1.6
Massachusetts	16	2,235,986	2,249,956	−0.6
Michigan	8	3,795,313	4,014,699	−5.5
Minnesota	19	1,936,361	1,929,699	0.3
Mississippi	32	1,151,872	1,208,384	−4.7
Missouri	12	2,494,873	2,528,616	−1.3

	1981 Rank	(Add 000 gal.) 1982 (a)	(Add 000 gal.) 1981 (b)	% Chng. '82 vs. '81
Montana	41	453,939	463,035	−2.0
Nebraska	36	792,579	798,518	−0.7
Nevada	39	490,270	508,535	−3.6
New Hampshire	44	393,276	398,692	−1.4
New Jersey	9	3,172,525	3,142,481	1.0
New Mexico	37	744,599	742,486	0.3
New York	3	5,617,353	5,674,946	−1.0
North Carolina	10	2,842,968	2,874,700	−1.1
North Dakota	42	403,067	408,449	−1.3
Ohio	6	4,501,134	4,766,658	−5.6
Oklahoma	20	1,929,207	1,922,403	0.4
Oregon	31	1,211,110	1,271,001	−4.7
Pennsylvania	7	4,370,932	4,476,479	−2.4
Rhode Island	45	360,833	368,524	−2.1
South Carolina	25	1,515,808	1,529,196	−0.9
South Dakota	43	397,401	403,635	−1.5
Tennessee	15	2,355,395	2,388,466	−1.4
Texas	2	8,201,704	8,149,252	0.6
Utah	35	805,579	709,070	13.6
Vermont	49	236,905	234,114	1.2
Virginia	13	2,493,638	2,530,673	−1.5
Washington	22	1,851,127	1,872,364	−1.1
West Virginia	34	810,848	804,632	0.8
Wisconsin	18	1,982,060	2,067,800	−4.1
Wyoming	46	359,425	375,068	−4.2
U.S. Total		**102,718,987**	**104,150,406**	**1.4%**

(a) Preliminary: (b) Revised and final.
Source: Federal Highway Administration, monthly reports and NPN estimates for Idaho and Kansas for December.

. . . and by Types of Vehicles

	Passenger Vehicles						
		Buses					
	Cars and Motorcycles	Commercial	School	All Buses	Total Passenger	Trucks and Combinations	All Motor Vehicles
Fuel consumed (million gal.)	72,080 (a)	711	376	1,087	73,166	41,287	114,453
Average per vehicle (gal.)	557 (b)	6,624	861	1,998	564	1,198	697
Average miles per gal.	15.71 (c)	4.98	7.65	5.90	15.56	9.97	13.55
Vehicles registered (thousands)	129,293 (d)	107	437	544	129,837	34,451	164,288
Average miles traveled	8,758 (e)	32,987	6,585	11,795	8,771	11,945	9,436
Average miles traveled (millions):							
Main rural roads	271,621	787	841	1,628	273,249	133,016	406,265
Local rural roads	184,911	453	943	1,396	186,307	94,327	280,634
Urban streets	675,978	2,300	1,091	3,391	679,189	184,183	863,372
Total travel 1981 (f)	**1,132,330**	**3,540**	**2,875**	**6,415**	**1,138,745**	**411,526**	**1,550,271**
Total travel 1980 (g)	**1,129,887**	**3,500**	**2,900**	**6,400**	**1,136,287**	**384,570**	**1,520,857**

(a) 71,719,694,000 for passenger cars, 360,000,000 for motorcycles; (b) 581 for passenger cars, 62 for motorcycles; (c) 15.54 mpg for passenger cars, 50.00 mpg for motorcycles; (d) 123,461,507 for passenger cars, 5,831,132 for motorcycles; (e) 9.026 for passenger cars, 3,087 for motorcycles; (f) 1,114,330,000 for passenger cars, 18,000,000 for motorcycles; (g) 1,111,887,000 for passenger cars, 18,000,000 for motorcycles.
Source: Federal Highway Administration, Table 5581-14 (VM-1), October, 1982.

State Gasoline Consumption by Rank

	1982 Rank	1981 Rank	(Add 000 gal.) 1982 Total
California	1	1	10,660,534
Texas	2	2	8,201,704
New York	3	3	5,617,353
Florida	4	4	4,900,102
Illinois	5	6	4,522,361
Ohio	6	5	4,501,134
Pennsylvania	7	7	4,370,932
Michigan	8	8	3,795,313
New Jersey	9	9	3,172,525
North Carolina	10	10	2,842,968
Georgia	11	11	2,818,366
Missouri	12	14	2,494,873
Virginia	13	13	2,493,638
Indiana	14	12	2,419,331
Tennessee	15	15	2,355,395
Massachusetts	16	16	2,235,986
Louisiana	17	18	2,145,094
Wisconsin	18	17	1,982,060
Minnesota	19	19	1,936,361
Oklahoma	20	20	1,929,207
Maryland	21	21	1,888,873
Washington	22	22	1,851,127
Alabama	23	23	1,828,876
Kentucky	24	24	1,717,556
South Carolina	25	25	1,515,808
Colorado	26	26	1,508,950
Iowa	27	27	1,420,298
Arizona	28	28	1,341,613
Connecticut	29	29	1,284,966
Kansas	30	31	1,234,055
Oregon	31	30	1,211,110
Mississippi	32	32	1,151,872
Arkansas	33	33	1,123,466
West Virginia	34	34	810,848
Utah	35	36	805,579
Nebraska	36	35	792,579
New Mexico	37	37	744,599
Maine	38	39	505,620
Nevada	39	38	490,270
Idaho	40	40	458,513
Montana	41	41	453,939
North Dakota	42	43	403,067
South Dakota	43	42	397,401
New Hampshire	44	46	393,276
Rhode Island	45	45	360,833
Wyoming	46	44	359,425
Hawaii	47	47	349,098
Delaware	48	48	282,463
Vermont	49	49	236,905
Alaska	50	50	235,112
District of Columbia	51	51	165,653

Source: Federal Highway Administration, Monthly Reports.

Underground Leak Problems??

Oil Recovery Systems specializes in equipment and techniques for the containment and clean up of gasoline and other petroleum products from leaking tanks and piping. Our systems have been involved in thousands of service station recoveries as well as scores of refinery and storage terminal spills.

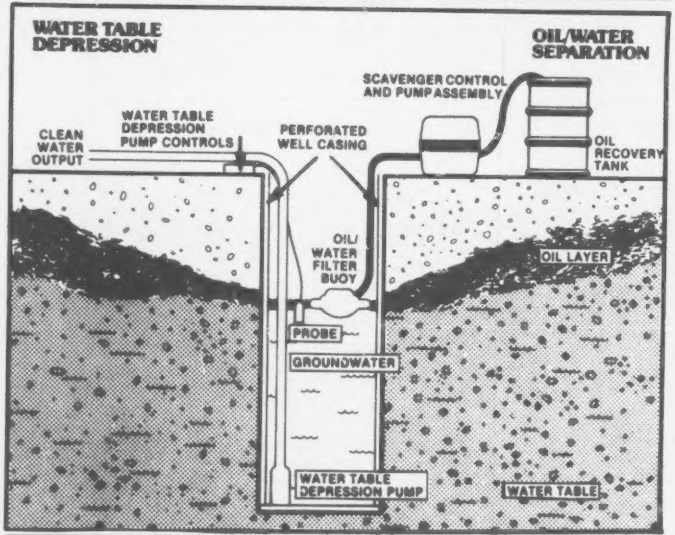
We offer a complete line of equipment, including the Scavenger Systems, Water Table Depression Pumps, Soil Venting Systems, Liquid Samplers, and Water Purification Systems. Our systems are designed to be explosion proof and fully automatic, providing the following advantages over traditional clean-up methods:

1. Low cost, fully automatic, minimizing labor costs and vacuum truck usage.
2. Ability to recover clean, water-free product that can be reblended with other fuel and reused.
3. Explosion-proof and intrinsically safe design provides for a safe cleanup.
4. Effective containment of the contaminating oil, preventing the problem from spreading.
5. Eliminates the need for costly disposal of oily-water mixtures.

In addition to manufacturing equipment dedicated to cleaning up underground oil spills, we maintain throughout the United States a series of branch offices staffed with specially trained hydrogeologists, geologists, and field engineers. These experienced professionals offer complete pollution assessment and abatement services.

We can design an efficient recovery system and if necessary implement it, utilizing our nationwide network of distributors and service companies.

So if you have an underground leak problem at one of your service stations, please contact us. We can supply you with the right equipment for your particular problem; and if you wish, we can furnish the necessary geological consulting and engineering services to provide you with a safe and efficient clean up.



OIL RECOVERY SYSTEMS, INC.

SALES OFFICE: 299 Second Avenue, Needham (Heights), Mass 02194
(617) 449-5222

Gasoline Octanes, U.S. Service Stations

		Regular grade (1)			Premium grade (2)			Unleaded grade		
				(R+M)*			(R+M)*			(R+M)*
Year	Season	Rsh.	Mtr.	2	Rsh.	Mtr.	2	Rsh.	Mtr.	2
1982............	Summer	93.0	85.0	89.0	—	—	—	91.9(a) 96.8(b)	82.8(a) 86.6(b)	87.3(a) 91.7(b)
1981-82.........	Winter	92.7	85.1	88.9	98.1	87.8	93.0	91.8(a) 96.6(b)	82.9(a) 86.8(b)	87.4(a) 91.7(b)
1981............	Summer	92.8	85.1	89.0	—	—	—	91.9(a) 96.3(b)	83.0(a) 86.2(b)	87.4(a) 91.3(b)
1980-81.........	Winter	92.8	85.4	89.1	97.3	89.2	93.3	91.9(a) 96.1(b)	83.3(a) 86.5(b)	87.6(a) 91.4(b)
1980............	Summer	96.2	85.2	88.9	97.0	88.6	92.8	92.1(a) 96.1(b)	83.4(a) 86.4(b)	87.8(a) 91.6(b)
1979-80.........	Winter	92.5	85.5	89.0	97.2	89.3	93.2	92.1(a) 97.1(b)	83.7(a) 87.0(b)	87.9(a) 92.1(b)
1979............	Summer	92.8	85.7	89.3	97.6	89.8	93.7	93.0	84.1	88.6
1978-79.........	Winter	93.2	85.9	89.6	98.0	90.3	94.2	93.1	84.3	88.7
1978............	Summer	93.2	85.7	89.5	98.2	90.4	94.3	93.0	83.9	88.5
1977-78.........	Winter	93.2	85.7	89.5	98.8	91.0	94.9	92.9	83.9	88.4
1977............	Summer	93.2	85.9	89.6	98.7	91.2	95.0	92.9	83.9	88.5
1976-77.........	Winter	93.2	86.1	89.7	98.8	91.4	95.1	92.6	84.1	88.4
1976............	Summer	93.3	86.0	89.6	98.9	91.4	95.2	92.4	83.9	88.2
1975-76.........	Winter	93.4	86.0	89.7	98.9	91.4	95.2	92.3	84.0	88.2
1975............	Summer	93.4	86.0	89.7	98.9	91.4	95.2	92.1	83.9	88.0
1974-75.........	Winter	93.4	86.1	89.9	98.9	91.6	95.3	92.3	84.0	88.2
1974............	Summer	93.4	85.9	89.7	98.9	91.5	95.2			
1973-74.........	Winter	93.4	86.0	89.7	99.1	91.7	95.4			
1973............	Summer	93.5	86.1	89.8	99.3	91.9	95.6			
1972-73.........	Winter	93.9	86.4	90.2	99.6	92.2	95.9			
1972............	Summer	94.1	86.4	99.8	90.3	92.2	96.0			

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*Antiknock index.

(1) Below 93.0 octane; (2) 93.0 octane and above.

(a) Unleaded antiknock (octane) index data below 90. (b) Unleaded antiknock (octane) index data 90 and above.

Source: Motor Gasolines, Summer 1982, Bartlesville (Okla.) Energy Technology Center Department of Energy, May, 1983.

Octane Numbers Vary Regionally

Minor slippage in the octane numbers of leaded and unleaded gasolines are shown in the winter 1981-82 and the summer 1982 evaluation reports published by the Department of Energy, Bartlesville, Okla., Technology Center. As noted above, the government introduced a new concept for leaded gasolines in 1981, a below 93 index and an above 93 index. The government uses two methods to determine octane numbers—research and motor. These are combined and divided by two (R plus M divided by 2) to reach the number that is posted on service station pumps.

	Unleaded Octane Number						Leaded Octane Number (X)					
	Index Below 90			Index Above 90			Index Below 93			Index Above 93		
			(R+M)			(R+M)			(R+M)			(R+M)
	Rsch.	Mtr.	÷2	Rsch.	Mtr.	÷2	Rsch.	Mtr.	÷2	Rsch.	Mtr.	÷2
Northeast................	92.1	82.2	87.2	96.9	86.6	91.8	93.1	85.3	89.2	—	—	—
Mid-Atlantic Coast	92.2	82.7	87.5	96.9	86.7	91.8	93.2	85.2	89.3	—	—	—
Southeast...............	91.5	82.4	87.0	96.8	86.7	91.8	93.0	85.2	89.1	—	—	—
Appalachian.............	91.5	82.6	87.1	96.0	86.3	91.2	93.6	85.1	88.9	—	—	—
Michigan................	91.4	83.0	87.2	96.2	86.8	91.6	92.9	85.2	89.1	—	—	—
North Illinois	91.9	83.3	87.6	96.7	87.3	92.0	93.5	85.5	89.5	—	—	—
Central Mississippi.......	92.0	82.6	87.3	96.4	87.3	91.8	93.1	85.1	89.1	—	—	—
Lower Mississippi........	91.8	82.2	87.0	97.3	86.7	92.1	92.6	85.2	88.9	—	—	—
North Plains.............	91.6	82.9	87.3	97.5	87.4	92.5	91.8	84.1	88.0	—	—	—
Central Plains...........	92.4	83.0	87.8	98.6	86.8	92.7	93.0	84.8	89.0	—	—	—
South Plains	91.6	83.0	87.3	96.4	86.3	91.4	92.7	84.7	88.7	—	—	—
South Texas	91.9	82.5	87.2	97.0	86.5	91.7	93.2	85.2	89.2	—	—	—
South Mountain States ...	91.1	81.8	86.5	96.7	86.1	91.4	92.0	84.1	88.1	—	—	—
North Mountain States ...	90.5	81.7	86.1	95.8	86.2	91.0	91.8	83.4	87.7	—	—	—
Pacific Northwest........	92.6	83.5	88.1	96.3	86.7	91.5	93.5	84.9	89.3	—	—	—
North California..........	93.1	84.0	88.6	97.0	86.1	91.6	94.9	86.7	90.8	—	—	—
South California	92.6	83.5	88.0	96.7	86.5	91.6	93.9	85.6	89.8	—	—	—
Average												
Summer 1982	**91.9**	**82.8**	**87.3**	**96.8**	**86.6**	**91.7**	**93.0**	**85.0**	**89.0**	—	—	—
Summer 1981	**91.9**	**83.0**	**87.4**	**96.3**	**86.2**	**91.3**	**92.8**	**85.1**	**89.0**	—	—	—

(X) In 1981, DOE began two classifications for leaded gasoline—Below 93 octane and Above 93 octane. The data on above 93 octane were not available when this latest study was completed and published.

Source: Bartlesville (Okla.) Energy Technology Center, Department of Energy, Motor Gasolines, Summer, 1982, May, 1983.

Gasohol Consumption by States—1981

The table below, prepared by the Federal Highway Administration, shows gross gallons of gasohol reported by the distributors in each state. However, the agency says, the total must not be considered as a national total. In states where gasohol is taxed at the same rate as gasoline, the gallonage data are not reported separately and are commingled with gasoline data. In other states, however, partial tax exemptions have been legislated but the reporting systems have not yet been converted for separate reporting. In any case, this total should be considered a minimum not a national total.

(Add 000 gal.)

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alabama	—	—	—	—	—	—	—	—	—	—	—	—	—
Alaska	—	—	—	—	—	—	—	—	—	—	—	—	—
Arizona	122	128	159	136	147	96	135	95	70	179	180	396	1,843
Arkansas	526	857	685	392	559	583	537	404	354	228	381	596	6,104
California	3,179	5,531	6,651	6,787	6,234	12,385	11,546	13,158	15,044	17,155	19,751	30,374	147,795
Colorado	755	632	730	730	759	835	843	858	788	794	702	774	9,200
Connecticut	1,133	851	776	893	870	901	889	789	810	697	409	477	9,495
Delaware	6	—	4	10	—	—	—	—	—	—	—	—	20
Dist. of Col.	—	7	—	—	1	—	4	—	—	—	—	8	20
Florida	4,090	4,486	5,464	5,916	5,729	5,783	4,921	4,767	4,205	4,408	5,043	5,545	60,357
Georgia	809	578	507	467	390	359	260	147	133	32	74	75	3,851
Hawaii	137	121	145	145	124	123	120	103	107	97	90	99	1,411
Idaho	—	—	—	—	—	—	—	—	—	—	—	—	—
Illinois	3,828	3,316	7,275	7,414	7,171	7,598	7,594	7,135	—	—	—	—	51,331
Indiana	—	—	—	—	—	—	—	—	—	—	—	—	—
Iowa	15,790	11,406	14,591	13,406	13,571	10,821	15,614	12,886	15,042	18,026	22,607	26,598	190,358
Kansas	1,574	1,353	1,461	1,719	1,573	1,068	953	944	873	851	809	902	14,100
Kentucky	274	365	95	422	240	39	330	158	170	101	106	187	2,507
Louisiana	—	—	—	—	—	—	—	—	—	—	—	—	—
Maine	405	260	173	80	174	80	33	20	41	6	10	5	1,287
Maryland	1,235	1,001	1,208	1,205	806	695	596	440	440	93	17	18	7,754
Massachusetts	1,041	683	453	339	587	469	286	331	223	87	11	7	4,517
Michigan	3,619	3,756	4,492	3,009	6,014	5,746	6,412	6,862	6,269	5,227	7,473	7,651	66,530
Minnesota	1,087	273	407	99	611	406	203	28	24	22	20	20	3,200
Mississippi	—	—	—	—	—	—	—	—	—	—	—	—	—
Missouri	—	—	—	—	—	—	—	—	—	—	—	—	—
Montana	22	13	19	5	11	8	17	51	57	31	92	147	473
Nebraska	2,514	2,306	2,413	2,312	2,392	2,512	2,619	2,472	2,543	2,628	2,698	3,661	31,072
Nevada	—	—	—	—	—	—	—	142	143	143	115	98	641
New Hampshire	235	213	130	109	95	99	43	67	71	73	14	—	1,149
New Jersey	336	278	260	220	172	141	119	100	51	3	—	—	1,680
New Mexico	—	—	—	—	—	—	—	—	—	—	—	—	—
New York	—	—	—	—	—	—	—	—	—	—	—	—	—
North Carolina	1,425	1,167	1,189	1,340	1,375	1,185	1,181	1,038	931	893	694	756	13,174
North Dakota	1,122	995	916	1,027	850	952	930	808	806	908	832	857	11,003
Ohio	704	499	495	525	260	310	485	386	693	1,064	2,094	2,117	9,632
Oklahoma	3,088	4,322	2,568	3,542	4,092	3,823	3,777	1,532	3,069	1,370	3,563	2,753	37,499
Oregon	—	—	—	—	—	—	—	—	—	—	—	—	—
Pennsylvania	—	—	—	—	—	—	—	—	—	—	—	—	—
Rhode Island	55	49	49	28	28	29	26	32	28	3	13	59	399
South Carolina	946	1,218	1,270	1,397	1,350	1,300	1,260	1,119	1,356	1,216	1,045	1,041	14,518
South Dakota	392	655	784	627	545	548	608	612	490	542	404	526	6,733
Tennessee	—	—	—	—	—	—	—	—	—	—	—	—	—
Texas	—	—	—	—	—	—	—	—	—	—	—	—	—
Utah	—	—	—	—	—	—	—	—	—	—	—	—	—
Vermont	—	—	—	—	—	—	—	—	—	—	—	—	—
Virginia	—	—	—	—	—	55	358	357	317	240	268	396	1,991
Washington	896	1,079	1,048	764	888	1,068	640	781	720	294	1,181	623	9,982
West Virginia	49	29	35	4	3	4	—	4	2	4	—	—	134
Wisconsin	—	—	—	—	—	—	—	—	—	—	—	—	—
Wyoming	64	53	73	78	90	84	~~99~~	80	65	56	55	49	846
Total	51,460	48,502	56,525	55,147	57,711	60,125	63,458	58,706	55,935	57,471	70,751	86,815	722,606

Source: Federal Highway Administration, Monthly Gasoline Reports, 1982.

Gasohol Consumption by States—1982

The following table was prepared by the Federal Highway Administration and contains a variety of caveats, as follows: the table shows gross gallons of gasohol reported by the distributors in each state. However, this total must not be considered a national total. In states where gasohol is taxed at the same rate as gasoline, the gallonage data are not reported separately and are commingled with gasoline data. In other states, however, partial tax exemptions have been legislated but the reporting systems have not yet been converted for separate reporting. In any case, the totals on the state should be considered minimums and not maximums for states and the nation as a whole.

(Add 000 gal.)

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alabama	—	—	—	—	—	—	—	—	—	—	—	—	—
Alaska	—	—	—	—	—	—	—	—	—	—	—	—	—
Arizona	693	185	—	848	1,007	787	344	206	246	184	262	334	5,096
Arkansas	184	824	786	696	755	686	743	755	683	716	974	678	8,462
California	22,200	23,447	30,175	28,404	32,125	29,892	44,622	52,867	51,343	43,760	46,705	58,464	464,004
Colorado	2,122	2,128	2,134	2,097	2,026	2,414	3,106	2,704	2,500	2,000	2,000	2,000	27,231
Connecticut	441	436	427	335	328	422	359	351	372	355	264	371	4,461
Delaware	—	—	—	—	—	—	—	—	—	—	—	—	—
Dist. of Col.	—	—	4	5	—	—	—	—	—	—	—	—	9
Florida	4,975	6,507	8,343	7,660	8,781	5,835	7,288	7,790	8,318	11,629	11,848	14,079	103,053
Georgia	14	24	24	1	19	4	4	2	2	8	20	26	148
Hawaii	81	75	82	67	63	—	—	—	—	—	—	—	368
Idaho	—	—	—	—	—	—	—	549	509	453	478	—	1,989
Illinois	—	—	—	—	—	—	—	—	—	—	—	—	—
Indiana	—	—	—	—	—	—	—	—	—	—	—	—	—
Iowa	29,299	34,001	41,666	44,389	42,387	43,704	45,218	44,757	41,756	44,421	43,904	44,000	499,502
Kansas	738	693	619	614	583	550	551	588	588	570	—	—	6,094
Kentucky	472	202	161	232	216	230	1,273	294	1,298	5,756	477	8,261	18,872
Louisiana	—	—	—	—	—	—	—	—	—	—	—	—	—
Maine	—	—	—	—	—	—	—	—	—	—	—	—	—
Maryland	8	12	10	8	10	9	—	16	12	—	15	7	107
Massachusetts	24	26	14	31	34	18	27	25	24	26	22	19	290
Michigan	7,732	6,913	10,192	9,027	7,735	11,374	13,907	20,404	21,775	39,605	26,218	31,912	206,794
Minnesota	524	67	181	443	208	271	165	204	468	516	860	746	4,653
Mississippi	—	—	—	—	—	—	—	—	—	—	—	—	—
Missouri	—	—	—	—	—	—	—	—	—	—	—	—	—
Montana	162	233	252	506	987	1,266	1,261	1,213	843	1,023	1,208	1,194	10,170
Nebraska	3,637	4,016	4,817	4,762	4,647	6,160	7,279	9,254	10,454	11,030	11,404	12,218	89,698
Nevada	98	93	93	89	81	84	88	76	65	68	75	54	964
New Hampshire	—	—	—	—	—	—	—	—	—	—	—	—	—
New Jersey	—	—	—	—	—	—	—	—	—	—	—	—	—
New Mexico	—	—	—	—	—	—	—	—	93	42	51	—	186
New York	—	—	—	—	—	—	—	—	—	—	—	—	—
North Carolina	587	670	687	680	620	679	753	560	494	587	604	535	7,456
North Dakota	630	716	474	647	455	462	537	439	525	224	634	556	6,499
Ohio	2,202	1,909	1,404	1,038	897	1,712	3,165	5,115	8,195	19,986	19,304	—	64,927
Oklahoma	2,781	7,222	5,300	4,993	6,679	8,017	13,124	17,643	23,308	19,638	21,536	24,812	155,053
Oregon	—	—	—	—	—	—	—	—	—	—	—	—	—
Pennsylvania	—	—	—	—	—	—	—	—	—	—	—	—	—
Rhode Island	22	—	—	—	—	—	—	—	—	—	—	—	22
South Carolina	1,605	1,493	1,844	2,047	1,816	1,983	3,752	5,833	7,342	8,614	12,101	11,058	59,688
South Dakota	489	431	522	905	998975		1,044	1,083	1,678	2,123	1,874	1,869	13,991
Tennessee	—	—	—	—	—	—	—	—	—	—	—	—	—
Texas	383	410	540	543	559	486	1,316	1,963	3,581	6,580	7,437	14,342	38,142
Utah	—	—	—	—	—	—	—	—	—	—	—	—	—
Vermont	—	—	—	—	—	—	—	—	—	—	—	—	—
Virginia	778	2,644	1,562	1,854	2,184	2,845	3,323	2,550	2,774	3,783	3,776	2,761	30,834
Washington	266	911	482	471	387	363	516	811	1,232	682	838	271	7,230
West Virginia	—	—	—	—	—	—	—	—	—	—	—	—	—
Wisconsin	—	—	—	—	—	—	—	—	—	—	—	—	—
Wyoming	46	36	35	22	25	17	16	15	10	13	13	—	248
Total	**83,393**	**96,324**	**112,830**	**113,418**	**116,612**	**121,267**	**153,781**	**178,067**	**190,488**	**224,592**	**214,902**	**230,567**	**1,836,241**

Source: Federal Highway Administration, Monthly Gasoline Reports, 1982.

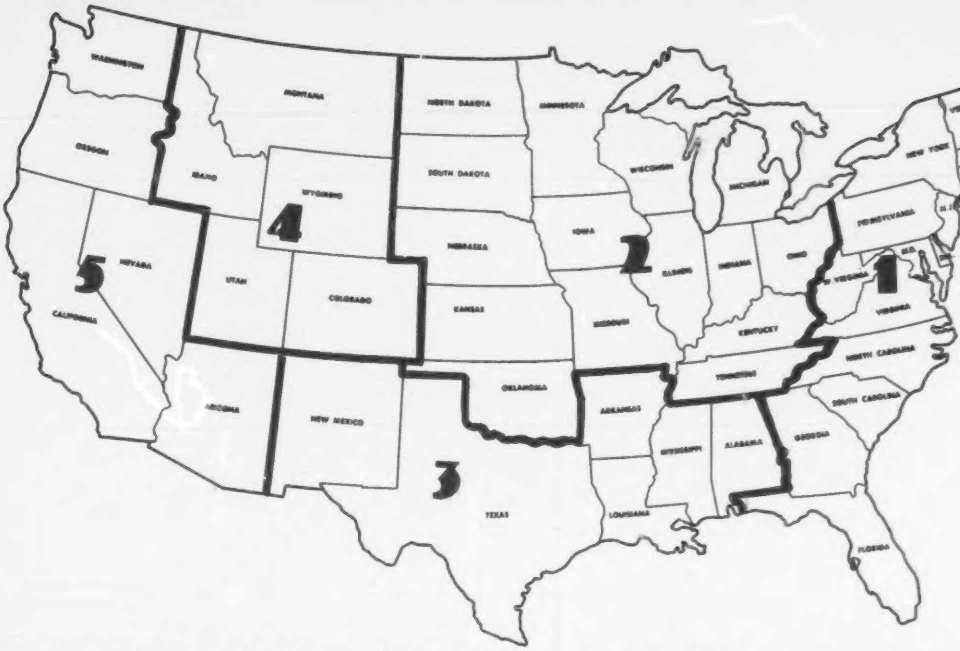
Diesel Sales for Highway Use

Diesel fuel sales for motor vehicles staged a modest comeback in 1981—not much but enough to prove they were better than in 1980. Diesel sales totaled 340.6-million bbl. in 1981, an increase of 5.3% over the preceding year's total of 323.4-million bbl. Off-highway consumption—primarily for construction and farm use—dropped sharply in 1981 for the second consecutive year. Sales amounted to 38.7-million bbl. in 1981 versus 45.0-million bbl. in 1980, a drop of 14.1%. Because the government changed its data-collection format in 1981, the current data is not comparable with prior years.

(Add 000 bbl.)

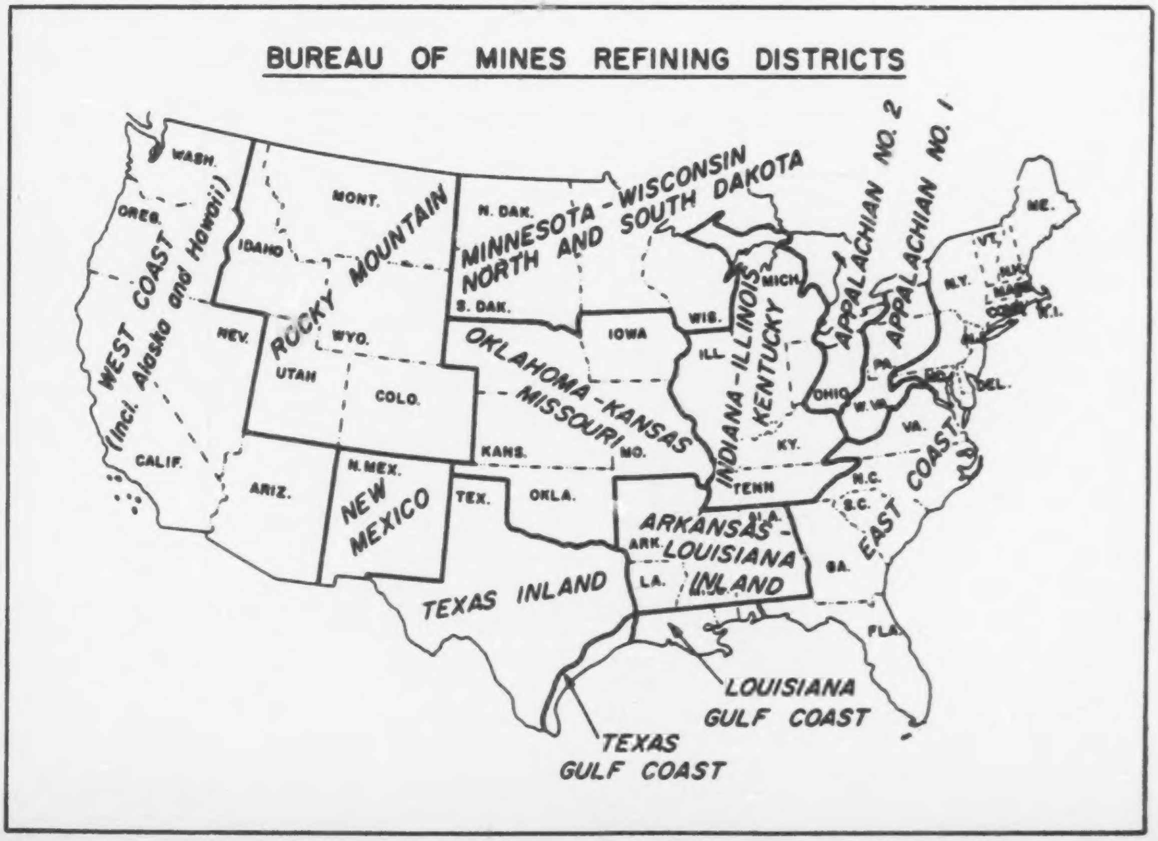
		On-Highway			Off-Highway		
Region	State	1981	1980	% Change	1981	1980	% Change
New England	Connecticut	2,262	2,446	(7.5)	380	422	(10.0)
	Maine	1,248	1,349	(7.5)	176	183	(3.8)
	Massachusetts	4,419	4,346	1.2	282	250	12.8
	New Hampshire	692	656	5.5	113	99	14.1
	Rhode Island	590	638	(7.5)	25	37	(32.4)
	Vermont	753	699	7.7	222	191	16.2
	Total	**9,964**	**10,134**	**(1.7)**	**1,198**	**1,182**	**1.4**
Mid-Atlantic	New Jersey	7,460	8,066	(7.5)	562	665	(15.5)
	New York	7,227	7,814	(7.5)	774	1,054	(26.6)
	Pennsylvania	15,311	16,555	(7.5)	2,476	2,564	(3.4)
	Total	**29,998**	**32,435**	**(7.5)**	**3,812**	**4,283**	**(11.0)**
South Atlantic	Delaware	862	825	4.5	78	167	(53.3)
	Dist. of Columbia	376	406	(7.4)	10	13	(23.1)
	Florida	12,968	11,704	10.8	630	1,082	(41.8)
	Georgia	12,067	10,554	14.3	171	386	(55.7)
	Maryland	4,730	3,891	21.6	571	658	(13.2)
	North Carolina	9,526	8,987	6.0	370	494	(25.1)
	South Carolina	4,968	5,372	(7.5)	193	265	(27.2)
	Virginia	9,038	7,466	21.1	574	843	(31.9)
	West Virginia	2,833	2,904	(2.4)	327	1,069	(69.4)
	Total	**57,368**	**52,109**	**10.1**	**2,924**	**4,977**	**(41.2)**
North East Central	Illinois	15,037	14,308	5.1	826	1,281	(35.5)
	Indiana	13,599	13,551	0.4	575	617	(6.8)
	Michigan	8,230	7,140	15.3	481	652	(26.2)
	Ohio	16,663	16,604	0.4	3,195	2,583	23.3
	Wisconsin	7,230	7,153	1.1	442	569	(22.3)
	Total	**60,759**	**58,756**	**3.4**	**5,519**	**5,712**	**(3.4)**
North West Central	Iowa	6,334	6,312	0.3	314	312	0.6
	Kansas	5,468	5,449	0.3	331	562	(34.1)
	Minnesota	5,957	5,936	0.4	499	727	(31.4)
	Missouri	8,460	8,430	0.4	732	923	(20.7)
	Nebraska	3,438	3,426	0.4	199	272	(26.8)
	North Dakota	2,035	1,849	10.1	190	153	24.2
	South Dakota	1,714	1,708	0.4	97	129	(24.8)
	Total	**33,406**	**33,110**	**0.9**	**2,362**	**3,018**	**(21.7)**
East South Central	Alabama	6,782	7,570	(10.4)	733	676	(8.4)
	Kentucky	5,911	5,890	0.4	947	3,320	(71.5)
	Mississippi	5,848	4,824	21.2	991	789	25.6
	Tennessee	9,112	9,080	0.4	417	601	(30.6)
	Total	**27,653**	**27,364**	**1.0**	**3,088**	**5,386**	**(42.7)**
Southwest Central	Arkansas	5,458	4,942	10.4	733	1,411	(48.0)
	Louisiana	10,031	6,756	48.5	2,068	1,163	(77.8)
	Oklahoma	8,143	7,144	14.0	1,095	1,133	(3.4)
	Texas	31,564	28,170	12.0	5,465	4,394	24.4
	Total	**55,196**	**47,012**	**17.4**	**9,361**	**8,101**	**15.6**
Rockies	Arizona	5,323	5,137	3.6	379	737	(48.6)
	Colorado	3,458	3,358	3.0	655	962	(31.9)
	Idaho	1,331	1,293	2.9	639	474	34.8
	Montana	2,384	2,315	3.0	184	441	(58.3)
	Nevada	1,813	1,833	(1.1)	158	194	(18.6)
	New Mexico	5,848	3,939	48.5	1,733	1,149	50.8
	Utah	2,760	2,609	5.8	527	707	(25.5)
	Wyoming	2,271	2,206	2.9	883	1,921	(54.0)
	Total	**25,188**	**22,690**	**11.0**	**5,158**	**6,585**	**(21.7)**
Pacific Coast	Alaska	1,067	1,079	(1.1)	269	187	43.9
	California	28,423	27,083	4.9	2,960	2,702	8.8
	Hawaii	423	428	(1.2)	235	237	0.9
	Oregon	5,651	5,714	(1.1)	599	1,496	(60.0)
	Washington	5,456	5,517	(1.1)	1,180	1,159	1.8
	Total	**41,020**	**39,821**	**3.0**	**5,243**	**5,781**	**(9.3)**
	U.S. Total	**340,552**	**323,431**	**5.3**	**38,665**	**45,025**	**(14.1)**

Source: Deliveries of Fuel Oil and Kerosine in 1981, Petroleum Supply Annual, 1981, Department of Energy, July, 1982.



PAD 1: Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia; **PAD 2:** Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin; **PAD 3:** Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas; **PAD 4:** Colorado, Idaho, Montana, Utah, and Wyoming; **PAD 5:** Alaska, Arizona, California, Hawaii, Nevada, Oregon, and Washington.

Source: Energy Data Reports, Department of Energy.


BUREAU OF MINES REFINING DISTRICTS
WASH.
OREG.
WEST COAST (Incl. Alaska and Hawaii)
CALIF.
NEV.
IDAHO
MONT.
ROCKY MOUNTAIN
WYO.
UTAH
COLO.
ARIZ.
N. MEX.
NEW MEXICO
N. DAK.
S. DAK.
MINNESOTA - WISCONSIN NORTH AND SOUTH DAKOTA
IOWA
OKLAHOMA - KANSAS - MISSOURI
KANS.
MO.
TEX.
OKLA.
TEXAS INLAND
ARKANSAS - LOUISIANA INLAND
ARK.
LA.
WIS.
ILL.
MICH.
INDIANA - ILLINOIS - KENTUCKY
KY.
TENN
OHIO
W. VA.
APPALACHIAN NO. 2
APPALACHIAN NO. 1
PA.
N.Y.
ME.
VT.
N.H.
MASS.
CONN.
R.I.
N.J.
DEL.
MD.
VA.
N.C.
S.C.
GA.
ALA.
MISS.
FLA.
EAST COAST
LOUISIANA GULF COAST
TEXAS GULF COAST

Average Gasoline Prices in 1982—Retail

(¢ per gal.)

City	Average Retail Prices				Average Wholesale Prices (b)				Apparent Average Margins			
	Regular		Premium		Regular		Premium		Regular		Premium	
	Lead	Unld.	Lead	Unld.	Lead	Unld.	Lead	Unld.	Lead	Unld.	Lead	Unld.
Albuquerque, NM												
Full service	135.46	140.37	151.41	140.96	100.92	104.89	109.03	110.18	21.03	21.97	28.87	17.27
Self-service	116.97	122.45	145.57	131.90	99.26	103.06	109.26	109.01	4.20	5.88	22.80	9.38
Anchorage, AK												
Full service	148.20	153.35	159.90	159.05	108.00	112.29	118.19	117.86	28.20	29.06	29.71	29.19
Self-service	125.35	135.12	145.90	148.85	108.15	112.58	117.79	117.94	5.20	10.54	16.11	18.91
Atlanta, GA												
Full service	139.92	146.50	—	152.74	98.29	102.22	—	107.72	25.04	27.44	—	27.94
Self-service	116.09	124.99	—	139.31	97.68	101.53	—	106.83	2.74	7.44	—	15.91
Bakersfield, CA												
Full service	140.33	147.92	152.76	153.43	100.06	103.31	108.90	109.07	21.33	25.24	24.21	24.68
Self-service	121.35	128.64	135.77	141.78	99.08	102.54	106.27	108.52	4.40	7.82	10.81	14.23
Baltimore, MD												
Full service	133.80	139.14	—	146.94	97.32	101.21	—	106.50	22.29	23.74	—	26.25
Self-service	113.48	119.37	—	136.48	97.23	101.11	—	106.37	2.06	4.07	—	15.92
Birmingham, AL												
Full service	134.72	140.91	—	147.26	98.27	102.23	—	107.32	20.45	22.68	—	23.94
Self-service	118.79	127.18	134.40	137.66	97.55	101.43	104.66	106.40	5.24	9.75	13.74	15.26
Boise, ID												
Full service	139.68	144.25	149.26	151.36	102.48	106.49	108.70	113.18	20.91	21.47	24.27	21.89
Self-service	123.38	129.56	137.81	143.39	100.95	104.92	109.53	112.82	6.14	8.35	11.99	14.28
Boston, MA												
Full service	123.40	129.39	127.52	140.04	100.24	104.15	107.88	109.36	8.49	10.57	4.97	16.01
Self-service	118.04	123.71	127.83	135.31	99.31	103.30	107.97	108.43	4.06	5.74	5.19	12.21
Charlotte, NC												
Full service	136.89	141.79	141.51	147.99	99.00	102.94	104.99	108.14	21.89	22.85	20.52	23.85
Self-service	117.27	124.46	—	134.26	97.51	101.31	—	106.29	3.76	7.15	—	11.97
Chicago, IL												
Full service	140.41	146.52	144.06	155.76	99.07	102.94	103.25	108.34	19.48	21.38	18.75	24.69
Self-service	121.67	128.05	140.18	143.88	98.56	102.39	102.26	107.89	2.31	4.50	16.08	13.94
Cincinnati, OH												
Full service	131.83	137.57	147.07	145.65	98.49	102.38	103.09	107.61	17.86	19.71	28.50	22.56
Self-service	116.23	122.96	—	134.17	97.93	101.79	—	107.21	2.82	5.69	—	11.48
Denver, CO												
Full service	134.66	140.18	143.76	147.88	100.01	103.91	106.73	108.58	21.65	23.27	24.03	26.30
Self-service	114.06	122.31	136.03	133.19	98.17	101.97	107.62	107.43	2.89	7.34	15.41	12.76
Des Moines, IA												
Full service	138.32	144.79	141.58	143.57	101.73	105.71	111.90	109.11	19.59	22.08	12.68	17.46
Self-service	118.99	126.22	129.65	128.99	99.08	103.06	111.90	107.55	2.91	6.16	.75	4.44
Detroit, MI												
Full service	143.64	149.36	—	158.29	98.18	102.07	—	107.38	25.36	26.97	—	30.24
Self-service	118.21	125.12	—	140.84	97.62	101.45	—	106.69	1.46	4.28	—	14.15
El Paso, TX												
Full service	126.64	131.73	142.43	141.9[illegible]	99.27	103.26	110.64	107.93	18.37	19.47	22.79	25.02
Self-service	114.11	120.35	138.86	129.[illegible]	97.63	101.53	111.07	109.36	7.48	9.82	18.79	11.02
Fresno, CA												
Full service	141.38	147.93	148.96	154.[illegible]	100.42	103.67	108.29	109.52	21.96	24.89	21.24	25.63
Self-service	123.28	131.37	137.12	143.26	99.59	103.09	106.60	108.84	5.71	9.84	11.76	15.31
Honolulu, HI												
Full service	152.27	158.16	162.23	164.38	104.46	108.07	112.03	115.87	22.95	25.01	24.96	23.19
Self-service	135.72	146.82	153.88	152.60	104.13	107.89	111.96	111.54	7.37	14.28	17.00	16.19
Houston, TX												
Full service	132.52	137.48	137.02	144.02	97.60	101.56	103.26	106.50	25.92	26.92	24.76	28.52
Self-service	110.26	118.91	—	129.19	96.29	100.03	—	105.28	4.97	9.88	—	14.91
Indianapolis, IN												
Full service	141.48	146.50	133.34	153.67	97.95	101.76	101.85	106.84	23.70	24.72	11.97	26.53
Self-service	118.57	124.59	135.45	140.57	97.70	101.44	105.20	106.73	1.92	3.97	10.65	14.04
Jackson, MS												
Full service	139.52	145.02	154.83	151.90	98.47	102.36	105.10	107.65	21.41	22.75	29.36	24.02
Self-service	122.29	129.28	—	139.57	97.32	100.96	—	106.62	6.15	9.16	—	13.30
Kansas City, MO												
Full service	127.69	133.01	141.76	142.32	98.70	102.53	108.36	108.26	17.99	19.48	22.40	23.06
Self-service	112.10	118.67	130.83	129.29	97.02	100.71	108.36	106.34	4.08	6.96	11.47	11.95
Las Vegas, NV												
Full service	141.82	148.03	151.96	154.03	100.65	104.20	109.43	109.77	23.91	26.57	25.27	27.00
Self-service	119.00	127.90	138.12	142.22	99.59	103.23	105.98	109.37	2.15	7.41	14.88	15.59
Long Island, NY												
Full service	127.35	134.67	136.14	146.23	100.34	104.26	108.82	109.66	7.03	9.94	6.75	15.33
Self-service	122.98	129.88	129.29	141.61	100.17	104.11	109.41	109.30	3.12	5.62	.23	11.38
Los Angeles, CA												
Full service	137.36	143.41	147.32	150.38	99.25	102.57	107.82	108.41	19.12	21.49	19.93	22.22
Self-service	120.00	126.54	137.52	139.53	98.69	102.07	105.48	108.24	3.33	6.10	13.04	12.17
Louisville, KY												
Full service	133.74	138.87	—	145.75	99.37	103.26	—	108.44	20.55	21.79	—	23.49
Self-service	115.14	122.47	—	132.03	97.50	101.23	—	106.55	3.82	7.42	—	11.66
Memphis, TN												
Full service	135.67	141.38	145.40	147.01	98.67	102.57	105.51	107.76	23.00	24.81	25.89	25.25
Self-service	114.10	122.49	144.18	134.84	97.55	101.25	104.01	106.33	2.55	7.24	26.17	14.51

Note: Self-service includes mini-service. There is no self-service in New Jersey and Oregon; (b) Wholesale average prices combine (1) average dealer buying prices (dealer tankwagon, extax) and (2) average rack prices plus 1¢ gal. average haul. Although there is no full-service or self-service distinction at wholesale. Average wholesale prices may be different because the brand mix of each set is different.

Source: The Lundberg Survey, Inc., April, 1983.

And Wholesale and Apparent Margins

(¢ per gal.)

	Average Retail Prices				Average Wholesale Prices (b)				Apparent Average Margins			
	Regular		Premium		Regular		Premium		Regular		Premium	
City	Lead	Unld.	Lead	Unld.	Lead	Unld.	Lead	Unld.	Lead	Unld.	Lead	Unld.
Miami, FL												
Full service	133.07	139.92	143.41	147.30	99.27	103.18	110.79	108.68	21.80	24.74	—	26.62
Self-service	113.42	121.96	—	133.69	98.86	102.68	—	106.18	2.56	7.28	20.62	13.51
Milwaukee, WI												
Full service	135.90	142.05	122.90	148.63	99.03	103.16	98.00	108.41	19.87	21.89	7.90	23.22
Self-service	117.88	124.92	—	135.76	98.37	102.32	—	107.28	2.51	5.60	—	11.48
Minneapolis, MN												
Full service	145.00	150.15	144.41	159.16	100.86	104.82	100.52	110.06	27.14	28.33	26.89	32.10
Self-service	119.65	125.95	137.71	135.43	99.05	102.85	104.79	108.04	3.60	6.10	15.92	10.39
New Haven, CT												
Full service	130.40	136.52	133.73	146.02	101.66	105.54	110.06	110.57	13.74	15.98	8.67	20.45
Self-service	119.56	126.04	—	138.90	101.40	105.23	—	110.19	3.16	5.81	—	13.71
New Orleans, LA												
Full service	138.28	143.98	—	150.89	97.90	101.91	—	107.14	28.38	30.07	—	31.75
Self-service	113.34	120.70	—	135.83	97.07	100.90	—	106.03	4.27	7.80	—	17.80
Newark, NJ												
Full service	118.09	124.82	—	135.35	98.78	102.64	—	107.73	7.31	10.18	—	15.62
Self-service	114.72	121.17	—	131.46	97.07	100.67	—	105.46	5.65	8.50	—	14.00
Norfolk, VA												
Full service	138.06	142.81	—	149.28	98.58	102.50	—	107.66	24.48	25.31	—	26.62
Self-service	118.72	124.76	—	137.04	97.87	101.69	—	106.76	5.85	8.07	—	15.28
Omaha, NE												
Full service	137.87	143.78	—	150.93	100.04	104.04	—	108.85	20.01	21.92	—	24.25
Self-service	119.33	126.31	158.40	134.52	98.87	102.82	99.65	107.95	2.64	5.67	40.93	8.75
Philadelphia, PA												
Full service	129.34	134.82	—	145.93	98.40	102.20	—	107.26	15.94	17.62	—	23.67
Self-service	115.68	120.24	—	140.43	98.17	101.89	—	106.72	2.51	3.35	—	18.71
Phoenix, AZ												
Full service	135.36	140.27	—	145.89	97.22	101.10	—	106.56	25.13	26.16	—	26.32
Self-service	112.85	121.64	135.52	134.26	96.90	100.63	105.63	106.07	2.94	8.00	16.88	15.18
Pittsburgh, PA												
Full service	124.78	130.16	—	140.15	99.81	103.75	—	108.84	9.97	11.41	—	16.31
Self-service	116.87	122.20	—	135.36	99.76	103.63	—	108.86	2.11	3.57	—	11.50
Portland, OR												
Full service	130.10	137.20	146.64	146.67	98.80	102.06	107.44	107.88	16.30	20.14	24.20	23.79
Self-service	117.94	126.60	140.91	140.23	98.67	101.93	107.14	107.71	4.27	9.67	18.77	17.52
Providence, RI												
Full service	128.56	135.91	—	144.95	99.56	103.37	—	108.55	13.77	17.31	—	21.17
Self-service	120.02	126.21	—	137.80	99.06	102.81	—	107.90	5.73	8.17	—	14.67
Reno, NV												
Full service	147.09	153.54	161.32	161.34	102.52	105.95	110.39	111.98	25.31	28.33	31.67	30.10
Self-service	124.70	131.36	146.60	147.17	101.57	105.10	109.33	110.21	3.87	7.00	18.01	17.70
Rochester, NY												
Full service	128.37	133.61	—	143.65	100.56	104.32	—	109.62	7.93	9.07	—	13.15
Self-service	123.96	129.14	—	139.87	100.08	103.87	—	109.05	4.29	5.34	—	10.19
Sacramento, CA												
Full service	142.11	147.72	149.53	154.15	100.20	103.37	108.28	109.39	22.87	24.99	21.79	25.03
Self-service	120.48	127.76	135.64	141.56	98.73	102.25	104.87	108.73	3.93	7.28	12.09	13.82
Salt Lake City, UT												
Full service	132.99	138.06	143.79	149.50	100.49	104.45	108.71	109.90	17.50	18.61	20.08	24.60
Self-service	120.13	125.58	134.24	134.33	98.79	102.79	106.96	107.96	6.34	7.79	12.28	11.37
San Diego, CA												
Full service	141.29	146.55	150.48	153.48	99.73	103.00	108.49	108.80	22.56	24.25	22.47	24.99
Self-service	120.82	127.30	138.17	142.70	98.74	102.08	105.26	108.51	4.24	7.01	14.09	15.11
San Francisco, CA												
Full service	140.33	146.45	151.40	153.55	100.30	103.52	108.24	109.41	20.81	23.35	23.29	24.15
Self-service	123.05	130.89	140.47	142.99	99.61	102.93	105.49	109.15	5.23	9.30	15.75	14.47
Seattle, WA												
Full service	138.64	143.62	149.55	150.88	98.78	101.97	107.47	107.88	23.86	25.65	26.08	27.00
Self-service	117.62	125.18	139.05	139.15	98.31	101.61	106.98	107.37	3.31	7.57	16.07	15.78
Spokane, WA												
Full service	135.17	140.48	153.68	147.15	99.85	103.15	104.91	109.13	19.32	21.33	32.77	22.02
Self-service	121.48	127.28	130.76	134.79	99.04	102.41	104.71	108.03	6.44	8.87	10.05	10.76
St. Louis, MO												
Full service	130.63	136.28	146.90	144.62	98.45	102.22	110.50	108.01	21.18	23.06	25.40	25.61
Self-service	110.94	118.86	123.68	132.33	97.63	101.32	104.03	106.87	2.31	6.54	8.65	14.46
Stockton, CA												
Full service	140.51	146.75	149.26	153.08	99.49	102.84	107.75	108.92	22.07	24.60	22.06	24.50
Self-service	121.58	129.10	135.05	141.01	98.61	102.01	105.48	108.17	5.09	8.78	10.93	13.86
Tampa/St. Pete, FL												
Full service	132.98	139.46	—	146.98	98.66	102.55	—	108.33	21.64	24.23	—	25.97
Self-service	112.14	121.78	—	135.62	97.93	101.66	—	107.22	1.53	7.44	—	15.72
Tucson, AZ												
Full service	129.79	135.27	124.88	143.37	97.60	101.62	104.71	106.99	19.18	20.64	7.16	23.37
Self-service	113.70	121.74	131.33	134.26	97.28	101.08	104.71	106.83	3.41	7.67	13.61	14.42
Washington, DC												
Full service	137.50	142.81	—	150.23	97.20	101.10	—	106.49	24.35	25.76	—	27.79
Self-service	116.93	123.03	—	138.01	97.06	100.92	—	106.34	3.92	6.18	—	15.72

Wholesale Price Trends Through 1982

	Refinery products in eight refinery markets representing total U.S.						Crude	
Year	Motor gasoline ¢ gal.	Kero-sine ¢ gal.	Light fuel ¢ gal.	Heavy fuel ¢ gal.	Average 4 products		8 areas $/bbl.	Products vs. crude $/bbl.
					¢ gal.	$/bbl.		
1982 (a)	92.90	97.18	91.95	57.80	82.44	34.62	28.501	6.12
1981	101.63	101.03	97.20	61.17	88.75	37.28	31.770	5.51
1980	87.40	80.26	78.21	44.43	72.77	30.56	21.190	9.38
1979	56.84	56.50	54.47	33.63	49.50	20.79	12.640	8.15
1978	39.22	37.23	35.66	23.00	33.72	14.16	9.000	5.16
1977	36.99	35.81	34.41	25.87	32.21	13.95	8.570	5.38
1976	33.82	31.67	30.38	21.66	29.55	12.41	8.141	4.26
1975	30.27	27.41	26.09	22.03	27.03	11.35	7.560	3.79
1973	14.72	14.08	12.61	8.45	12.49	5.25	3.885	1.365
1971	12.70	12.90	10.75	7.76	10.94	4.59	3.385	1.205
1970	12.33	12.43	10.45	6.14	10.20	4.28	3.177	1.103
1965	11.52	11.28	9.04	4.81	9.12	3.83	2.864	0.966

(a) Preliminary

Source: Independent Petroleum Assn. of America. Product figures reflect trends in prices but not the actual sales realizations for producers or refiners.

AvGas, LPG and Natural-Gas Prices

	Aviation (¢ per gal. excluding taxes)							
	Av. Gasoline		Naphtha-type (a)	Kerosine-type		Wholesale (d)		Natural Gas $ per MCF for Residential Heating
	Wholesale (b)	Retail (c)	Retail (c)	Wholesale (b)	Retail (c)	Propane	Butane	
1982								
January	122.4¢	133.2¢	101.7¢	101.3¢	101.6¢	43.1¢	51.8¢	$4.86
February	122.0	134.0	101.3	100.0	101.0	38.3	48.9	4.87
March	117.0	134.8	98.4	97.6	99.6	35.7	49.6	5.06
April	113.4	132.7	96.0	93.0	96.8	34.9	56.1	5.18
May	109.6	132.7	94.1	91.7	95.5	35.4	65.6	5.63
June	114.7	132.5	98.4	94.1	95.3	36.9	67.9	5.62
July	120.4	134.4	98.7	94.3	95.3	39.7	69.7	5.60
August	117.7	132.6	97.3	95.0	95.4	43.8	72.2	5.56
September	115.7	130.0	98.2	95.5	95.1	49.5	77.4	5.82
October	116.6	131.5	98.5	98.4	95.8	51.0	75.7	6.11
November	118.4	130.7	96.4	98.1	96.4	53.2	76.2	5.94
December	119.6	130.0	94.0	93.6	95.6	49.5	72.7	6.06
1981								
January	118.9	121.6	99.2	97.1	95.7	46.5	66.1	4.10
February	121.3	128.1	102.7	103.6	101.6	48.2	63.0	4.13
March	127.2	131.1	106.9	104.8	106.3	48.3	62.1	4.21
April	117.5	131.3	109.0	103.8	106.4	49.3	60.1	4.25
May	120.7	133.5	109.1	104.4	106.2	48.6	56.8	4.61
June	116.5	132.1	107.6	102.3	104.8	46.0	52.7	4.61
July	120.1	133.4	106.3	100.5	103.8	46.0	56.5	4.64
August	120.0	132.5	105.7	101.4	103.3	47.2	60.6	4.70
September	121.0	133.5	105.6	103.0	103.3	47.7	64.6	4.90
October	117.2	134.5	104.8	99.9	101.1	47.3	64.7	4.91
November	114.4	133.2	104.5	101.9	102.6	47.5	61.6	4.88
December	116.8	131.9	103.8	101.9	102.2	45.5	55.4	4.75
Average 1982	**116.7**	**132.4**	**97.7**	**96.1**	**96.9**	**43.3**	**64.8**	5.53
1981	118.8	131.5	105.7	102.0	103.1	47.2	60.4	4.56
1980	107.2	109.4	88.2	87.5	87.4	42.6	61.8	3.95
1979	68.5	69.5	52.3	66.5	55.1	29.5	45.8	3.23
1978	51.0	52.1	37.5	38.9	38.9	24.0	23.0	2.63
1977	46.7	47.7	35.0	36.7	35.8	25.0	24.0	2.26
1976	42.4	43.1	31.5	32.5	31.2	20.6	21.9	1.85

(a) Nearly all naphtha-type fuels are sold directly to Defense Fuel Supply Center; hence, wholesale prices are not applicable; (b) Wholesale refers to the price of aviation fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation-fuel distributors; (c) retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts; (d) Wholesale refers to the price at which refiners, resellers, and gas plants sell to one another, including sales to agricultural and industrial accounts but excludes butane/propane mixtures.

Source: Department of Energy, Monthly Energy Review, March 1983.

Gasoline Prices by Grades and Months (a)

(U.S. averages, retail, including taxes, in ¢ per gal.)

		Leaded Regular	Unleaded Regular	Leaded Premium	Average for All Types
1982	January	128.5	135.8	145.6	134.1
	February	126.0	133.4	143.8	131.8
	March	120.6	128.4	140.7	126.8
	April	114.8	122.5	136.8	121.0
	May	116.6	123.7	137.9	122.4
	June	124.2	130.9	140.8	129.6
	July	126.3	133.1	145.0	131.8
	August	125.4	132.3	145.8	131.0
	September	123.6	130.8	144.1	129.5
	October	121.9	129.5	141.3	128.0
	November	120.7	128.3	141.2	126.8
	December	118.1	126.0	137.1	124.4
	Average	**122.2**	**129.6**	**141.7**	**128.1**
1981	January	123.8	129.8	133.8	126.9
	February	132.1	138.2	141.0	135.3
	March	135.2	141.7	144.9	138.8
	April	134.4	141.2	145.1	138.1
	May	133.3	140.0	144.7	137.0
	June	132.4	139.1	144.6	136.2
	July	131.5	138.2	144.6	135.3
	August	131.0	137.6	144.4	134.8
	September[2]	130.5	137.6	145.6	135.8
	October	129.9	137.1	145.7	135.3
	November	129.7	136.9	146.2	135.1
	December	129.3	136.5	146.0	134.8
	Average	**131.1**	**137.8**	**143.9**	**135.3**
Average	1980	119.1	124.5	128.1	122.1
	1979	85.7	90.3	92.2	88.2
	1978	62.6	67.0	69.4	65.2
	1977	62.2	65.6	67.4	NA
	1976	59.0	61.4	63.6	NA
	1975	56.7	NA	60.9	NA
	1974	53.2	NA	56.9	NA

(a) Department of Energy discontinued in 1980 its series breaking out full-service and self-service prices, see Factbook '81 for last reports of this type; also, beginning in September, 1981, Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. In the fourth column above, gasohol is now included and unleaded premium is weighted more heavily.

Source: Department of Energy, Monthly Energy Review, March 1983.

Distributor Diesel, Distillate and Resid Prices

	No. 2 Motor Fuel (¢ per gal. ex. taxes)		No. 2 Residential (¢ per gal.)			No. 6 ($ per bbl.) (a)	
	Wholesale	**Retail**	**Purchase Price**	**Selling Price**	**Margin**	**Wholesale**	**Retail**
1982							
January	98.0	105.3	101.5	122.0	19.3	27.07	29.83
February	94.8	103.2	98.3	120.7	21.3	26.29	30.02
March	90.2	98.0	91.3	115.3	22.6	25.73	29.50
April	86.6	96.1	90.0	113.2	22.0	25.46	28.21
May	89.1	97.6	95.1	114.3	18.4	26.52	28.93
June	93.5	102.2	98.5	116.2	16.9	26.62	29.59
July	93.4	101.1	98.6	115.8	16.3	25.97	29.33
August	92.3	99.3	96.7	115.9	18.2	26.34	28.44
September	92.4	99.8	97.7	115.2	16.3	26.49	28.43
October	95.7	102.1	102.0	119.6	16.7	27.52	29.28
November	97.4	104.2	101.9	121.9	18.9	28.43	30.05
December	91.2	100.1	95.9	119.7	22.9	26.47	29.26
Average	**92.2**	**100.5**	**97.29**	**117.5**	**19.2**	**26.53**	**29.09**
1981							
January	92.5	100.9	98.6	114.4	15.1	31.14	33.65
February	99.5	106.1	106.0	123.4	16.1	31.81	36.04
March	101.7	108.8	106.3	125.5	17.6	31.78	36.11
April	101.3	107.7	105.2	123.9	17.7	30.56	34.70
May	100.8	106.8	104.0	122.7	17.6	30.41	34.11
June	99.5	106.6	103.0	120.9	16.9	25.95	31.03
July	98.8	103.8	102.7	121.0	17.1	26.52	30.57
August	97.8	105.9	102.2	119.4	16.2	27.01	30.52
September	97.6	104.8	101.6	119.7	17.2	26.20	30.33
October	97.4	105.3	101.1	118.8	16.6	26.78	30.32
November	98.3	105.2	102.3	120.8	17.6	27.99	30.16
December	98.3	105.1	102.6	122.0	18.3	27.26	30.90
Average	**98.5**	**106.2**	**102.6**	**120.5**	**16.8**	**28.86**	**32.50**
Average 1980	81.2	87.3	82.2	97.8	15.8	23.14	26.09
1979	58.2	62.4	52.8	65.4	12.8	17.66	18.67
1978	37.1	40.2	38.5	49.2	10.9	11.51	12.77
1977	36.1	39.3	36.9	46.0	9.6	12.01	13.22
1976	31.9	34.7	32.6	40.6	8.8	10.60	11.46
1975	—	—	31.2	37.7	7.4	10.44	11.65

(a) This is an average for all sulfur levels of No. 2; 1% sulfur is fairly close to the average used here. Less than 1% is more expensive, more than 1¢ less costly; (b) Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded jobbers, unbranded jobbers, and commercial accounts. Retail refers to the price at which company-owned and operated retail dealers sell to customers.

Source: Department of Energy, Monthly Energy Report, March 1983.

Late Reports: Lundberg 1982 Data for Gasoline, On-Road Diesel, Gasohol and Distillate Volumes

Lundberg Survey, Inc., estimates 1982 consumption of principal motor fuels as follows: Taxable gasoline, 100.6-billion gal.; on-road diesel for cars, trucks and buses, 14.2-billion gal.; and gasohol, 1.9-billion gal. This adds up to a grand total of 116.7-billion gal. of liquids to keep the nation's highways humming smoothly. Lundberg Survey, in another special report, estimated No. 2 distillate consumption for the year 1982 at 47.0-billion gals.

	All Year 1982			
	Add 000 gal.			Add 000,000 gal.
	Taxable Gasoline	On-Road Diesel	Gasohol	No. 2 Distillates
Alaska	203,216	13,604	0	315
Alabama	1,796,223	295,625	11,522	563
Arkansas	1,074,120	239,641	7,904	509
Arizona	1,329,337	186,044	5,095	436
California	10,674,372	1,268,629	464,004	2,442
Colorado	1,440,457	189,004	27,231	457
Connecticut	1,239,509	122,251	4,460	785
Dist. of Col.	159,264	19,280	33	79
Delaware	284,360	32,480	0	701
Florida	4,840,162	572,415	93,973	1,081
Georgia	3,118,669	538,958	147	768
Hawaii	307,439	17,607	368	233
Iowa	896,930	280,402	497,738	676
Idaho	441,501	87,503	4,101	228
Illinois	4,794,464	546,705	NA	1,567
Indiana	2,389,541	602,342	NA	1,457
Kansas	1,139,069	209,107	7,189	721
Kentucky	1,676,108	247,797	18,448	907
Louisiana	2,081,617	313,704	NA	1,159
Massachusetts	2,204,091	184,936	286	1,325
Maryland	1,878,778	193,396	108	1,002
Maine	496,296	66,907	0	486
Michigan	3,536,576	354,477	206,794	1,005
Minnesota	1,954,703	282,383	4,653	881
Missouri	2,452,195	382,747	NA	804
Mississippi	1,125,899	176,096	NA	369
Montana	418,600	108,169	8,758	223
North Carolina	2,770,821	446,021	7,383	1,027
North Dakota	395,351	96,965	6,499	335
Nebraska	792,578	140,326	89,373	317
New Hampshire	383,123	29,460	267	225
New Jersey	3,169,954	374,381	0	3,982
New Mexico	720,771	147,304	188	249
Nevada	483,673	84,386	909	235
New York	5,362,897	400,780	NA	3,026
Ohio	4,545,169	655,328	70,829	2,404
Oklahoma	1,609,406	362,073	155,042	567
Oregon	1,188,332	248,270	NA	723
Pennsylvania	4,218,823	653,639	NA	2,724
Rhode Island	353,249	25,601	22	221
South Carolina	1,417,080	246,465	59,688	463
South Dakota	358,754	77,120	13,383	252
Tennessee	2,343,213	405,593	NA	926
Texas	8,125,209	1,490,326	38,143	4,486
Utah	658,679	113,679	NA	341
Virginia	2,424,768	355,598	30,834	1,212
Vermont	235,634	15,745	NA	148
Washington	1,822,067	215,049	7,230	785
Wisconsin	1,952,339	301,754	2,717	922
West Virginia	1,001,206	100,205	0	282
Wyoming	355,928	108,556	258	460
Total U.S.	**100,642,250**	**14,627,733**	**1,935,623**	**47,009**

(a) Gasohol U.S. total is estimated and includes "N.A." states, and all blended alcohol fuels qualifying for tax exemptions. (N.A.) states where data are not available separately.
Source: Lundberg Survey, Inc., May, 1983.

Residential Heating Oil Prices by Region

(¢ per gal).

	Standard Federal Regions (a)									
	1	2	3	4	5	6	7	8	9	10
1982										
January	125.3	124.7	120.6	118.7	117.1	(b)	112.7	116.1	(b)	119.7
February	123.2	123.7	119.3	115.3	116.0	(b)	110.9	114.9	(b)	119.5
March	117.4	119.0	112.3	112.9	111.0	(b)	106.4	109.7	(b)	118.1
April	113.9	116.6	112.2	109.4	108.7	(b)	100.8	106.3	(b)	116.0
May	115.9	117.1	113.2	111.7	110.8	(b)	108.7	108.4	(b)	116.6
June	117.5	118.5	115.2	113.5	114.4	(b)	111.8	112.3	(b)	116.0
July	117.7	118.5	113.4	115.2	113.6	(b)	111.7	(b)	(b)	115.9
August	118.6	118.8	113.9	112.4	111.9	(b)	(b)	(b)	(b)	116.3
September	119.4	119.3	(b)	115.0	112.4	(b)	(b)	114.2	(b)	116.2
October	122.3	122.4	118.5	117.3	114.8	(b)	110.5	113.1	(b)	117.4
November	124.3	124.8	120.1	118.9	115.9	(b)	112.1	114.8	(b)	119.1
December	122.1	123.0	118.0	114.1	113.4	(b)	107.3	111.9	(b)	118.7
1981										
January	116.2	117.1	113.2	114.0	110.4	(b)	106.3	108.6	(b)	107.5
February	125.8	126.6	123.0	124.4	117.8	(b)	114.2	113.1	(b)	113.7
March	127.6	128.4	125.0	125.3	119.3	(b)	115.4	119.3	111.5	116.5
April	126.8	126.6	122.7	124.8	118.3	(b)	114.7	118.4	(b)	117.5
May	125.5	125.6	122.1	118.8	117.3	(b)	114.5	115.1	114.1	115.6
June	124.1	123.6	121.1	115.9	116.5	(b)	112.5	116.0	(b)	117.1
July	123.3	122.9	120.6	120.2	116.0	(b)	115.9	116.2	(b)	118.3
August	122.7	122.2	117.9	117.4	115.1	(b)	112.1	116.9	(b)	117.7
September	122.7	121.4	118.5	120.5	116.2	(b)	111.6	116.8	(b)	117.8
October	122.5	122.0	115.3	117.6	116.3	(b)	112.0	115.8	(b)	118.2
November	123.3	123.2	119.5	118.2	116.7	(b)	114.1	115.8	(b)	118.8
December	124.8	124.7	120.7	119.0	117.4	(b)	112.4	117.1	(b)	120.0

(a) Standard Federal Regions are as follows: 1. Me., N.H., Vt., Mass., Conn., R.I.; 2. N.Y., N.J., Puerto Rico and Virgin Islands; 3. Pa., Md., W.Va., Va., D.C., Del.; 4. Ky., Tenn., N.C., S.C., Miss., Ala., Ga., Fla., Canal Zone; 5. Minn., Wis., Mich., Ill., Ind., Ohio; 6. Tex., N.M., Okla., Ark., La.; 7. Kan., Mo., Iowa, Neb.; 8. Mont., N.D., S.D., Wyo., Utah, Colo.; 9. Calif., Nev., Ariz., Hawaii, Trust Terr. of Pacific Is., American Samoa, Guam; 10. Wash., Ore., Ida., Alaska; (b) Not available for publication because samples are too small.

Source: Department of Energy, Monthly Energy Review, March 1983.

Average No. 6 Residual Fuel Oil Prices

($ per bbl., excluding taxes)

	0.0% to 0.3% sulfur		0.31% to 1.0% sulfur		Greater than 1.0% sulfur		Average	
	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail
1982								
January	33.03	37.56	28.90	31.13	24.60	25.94	27.07	29.83
February	31.67	38.41	29.30	30.95	23.60	24.70	26.29	30.02
March	30.95	38.96	27.60	30.57	23.45	24.21	25.73	29.50
April	30.11	36.77	27.08	30.00	23.57	24.40	25.46	28.21
May	30.38	37.97	27.89	30.05	25.15	25.94	26.52	28.93
June	27.98	38.93	28.26	30.89	25.35	26.56	26.62	29.59
July	30.05	37.46	27.39	29.84	24.19	26.49	25.97	29.33
August	28.86	31.82	27.50	30.37	25.40	26.02	26.34	28.44
September	30.22	32.41	27.73	30.45	25.21	25.93	26.49	28.43
October	31.98	33.51	29.51	32.24	25.72	26.59	27.52	29.28
November	32.28	34.14	29.36	32.24	26.30	26.96	28.43	30.05
December	31.24	32.59	27.87	30.21	[illegible]	26.19	26.47	29.26
Average	**30.91**	**36.34**	**28.27**	**30.71**	[illegible]	**25.82**	**26.53**	**29.09**
1981								
January	34.27	37.23	32.12	33.96	29.12	31.35	31.14	33.65
February	38.04	41.60	34.96	37.32	28.96	32.02	31.81	36.04
March	37.78	41.19	34.47	38.01	29.55	31.95	31.78	36.11
April	35.66	41.71	33.10	35.94	28.35	30.56	30.56	34.70
May	33.61	41.09	32.53	35.94	28.77	30.64	30.41	34.11
June	28.01	38.30	26.71	32.38	25.33	27.16	25.95	31.03
July	29.56	39.02	27.38	31.93	25.62	25.96	26.52	30.57
August	30.48	36.57	27.77	32.04	26.03	26.20	27.01	30.52
September	29.91	39.17	27.46	32.08	24.80	26.26	26.20	30.33
October	30.20	39.90	28.64	31.88	24.96	26.18	26.78	30.32
November	31.71	39.48	29.63	31.02	26.09	26.45	27.99	30.16
December	31.40	37.65	28.29	32.19	25.39	26.53	27.26	30.90
Average	**32.97**	**39.31**	**30.56**	**33.69**	**27.07**	**28.57**	**28.86**	**32.50**
Average 1980	26.41	31.13	24.91	27.59	20.77	22.11	23.14	26.09
1979	19.87	21.21	18.33	19.33	15.89	16.44	17.66	18.67
1978	12.77	14.47	11.95	12.78	10.73	11.70	11.51	12.75
1977	13.45	14.36	12.09	13.45	11.31	12.27	11.96	13.23
1976	12.20	12.54	10.83	11.79	9.98	10.43	10.72	11.49

(a) Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, commercial and residential accounts.

Source: Department of Energy, Monthly Energy Review, March 1983.

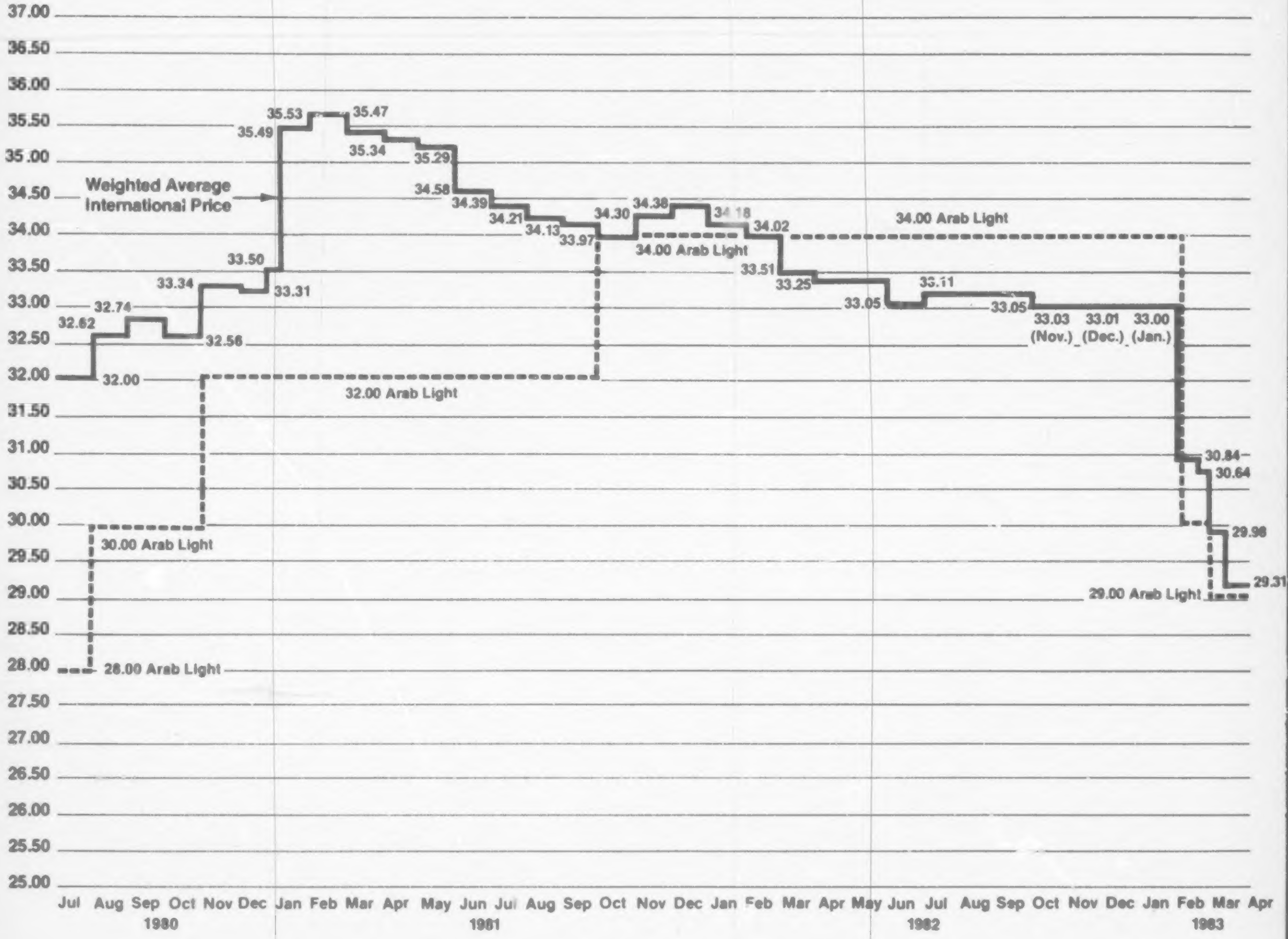
Spot Market Product Prices

($ per bbl.)

		Gasoline		Fuel Oil		Residual	
1983		**Rotterdam (98 Octane)**	**New York (89 Octane)**	**Rotterdam (0.5% Sulfur)**	**New York (0.2% Sulfur)**	**Rotterdam (1% Sulfur)**	**New York (1% Sulfur)**
Jan	7	34.88	35.13	37.73	34.86	27.55	25.75
	14	35.46	34.82	37.47	34.44	26.73	25.75
	21	34.29	36.29	37.00	35.60	26.58	26.00
	28	33.88	35.03	34.45	33.08	25.98	25.50
Feb	4	33.70	34.57	32.37	32.55	23.87	25.00
	11	31.48	34.92	32.37	32.86	23.50	25.50
	18	31.48	34.82	33.98	32.76	24.47	26.00
	25	30.72	33.24	30.63	31.08	22.97	25.00
Mar	4	31.01	32.99	31.70	30.56	23.50	25.25
	11	31.65	33.41	31.70	30.45	24.17	25.25
	18	32.30	34.57	31.64	30.56	24.92	25.25
	25	32.53	35.57	30.90	30.76	24.70	25.25
Apr	1	33.82	35.99	31.70	31.71	25.23	25.75
	8	34.70	36.77	32.51	32.66	25.30	26.00
	15	36.69	37.09	33.58	34.65	25.90	25.50
	22	35.58	37.40	33.78	35.28	25.60	26.75
	29	36.75	37.19	33.51	35.49	25.98	26.75
1982							
Jan	8	39.98	39.67	44.30	40.42	31.68	28.40
	15	38.68	38.72	43.57	39.90	30.78	29.00
	22	38.57	38.93	40.88	39.38	29.50	28.35
	29	38.22	38.30	39.21	38.22	29.73	28.70
Feb	5	37.22	37.67	38.40	38.54	28.68	28.50
	12	37.22	37.61	37.87	37.90	27.93	29.25
	19	35.93	37.61	37.87	37.80	27.93	29.25
	26	35.52	35.72	37.00	37.38	28.08	28.50
Mar	5	35.46	34.88	35.32	35.28	28.08	28.00
	12	34.41	34.57	34.38	33.60	26.95	27.00
	19	32.42	34.55	34.99	34.02	26.50	27.00
	26	32.83	34.52	36.13	34.06	26.65	26.25
Apr	2	36.64	36.54	35.52	34.54	26.80	26.25
	9	36.17	38.01	35.72	36.12	27.78	27.70
	16	36.64	38.22	36.66	36.54	28.53	28.50
	23	37.51	39.69	37.87	38.22	28.75	28.75
	30	39.57	39.40	39.68	38.32	29.43	29.00
May	7	41.68	40.53	38.81	37.80	29.80	29.25
	12	41.85	41.87	39.21	38.32	29.73	29.50
	19	42.67	42.29	40.21	38.85	29.73	28.75
	26	43.79	42.61	40.35	39.69	29.43	28.35
Jun	4	44.37	41.68	40.55	39.48	29.05	28.35
	11	44.08	42.21	39.34	39.90	27.40	28.40
	18	43.08	40.66	37.60	38.64	28.60	28.50
	25	39.57	39.56	36.53	38.33	28.45	28.25
Jul	2	39.86	40.07	37.27	38.01	27.10	27.00
	9	39.86	40.07	37.27	38.01	27.10	27.00
	16	40.04	39.73	35.32	37.59	25.90	27.00
	23	39.57	39.84	36.13	37.38	25.53	26.80
	30	40.12	39.59	36.98	36.96	27.78	27.00
Aug	6	38.80	39.59	37.33	37.06	28.00	27.00
	13	38.45	40.00	37.60	37.80	27.85	27.00
	20	39.15	40.00	38.70	37.80	27.85	27.25
	27	39.86	40.05	40.29	38.32	27.85	27.75
Sep	3	40.56	39.84	38.46	39.48	28.38	28.00
	10	40.39	39.69	41.02	39.58	28.68	29.25
	17	41.03	39.38	41.22	39.90	28.75	28.75
	24	42.61	39.38	41.22	41.26	28.90	29.60
Oct	1	41.03	38.54	41.96	41.58	29.88	30.25
	8	40.15	38.96	42.29	42.00	30.33	30.35
	15	41.03	38.74	42.96	42.42	30.48	31.00
	22	40.04	39.69	42.76	42.74	30.78	31.35
	29	39.39	38.96	41.42	41.37	30.26	30.75
Nov	5	39.80	38.45	38.88	41.37	29.95	30.50
	12	38.22	38.56	40.28	40.32	28.75	30.00
	19	36.11	37.02	38.81	38.85	26.88	28.00
	26	36.28	36.33	38.87	37.06	26.88	27.50
Dec	3	33.65	35.76	38.67	35.07	26.95	26.75
	10	33.88	36.50	38.20	36.96	26.80	25.75
	17	34.00	35.13	39.75	36.12	26.73	26.35
	24	33.70	34.92	39.28	34.86	26.73	26.35

World Crude Oil Prices (a)

(Dollars per bbl.)



(a) Internationally traded oil only. Average prices FOB weighted by estimated export volume.
Source: Department of Energy, Weekly Petroleum Status Report, April, 1983.

Landed Costs of Crude Oil from Selected Countries (a)

	Algeria	Canada	Indonesia	Iran	Libya	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela
1982	$34.89	$27.79	$36.81	$32.43	$35.66	$28.80	$36.06	$34.90	$34.16	$25.01
1981	40.49	32.16	37.57	(c)	40.92	33.78	39.70	34.19	37.24	29.87
1980	37.90	30.47	33.92	(c)	37.72	31.80	30.05	30.02	35.88	25.86
1979	21.90	20.43	20.69	25.02	23.68	20.86	22.96	19.15	22.16	18.18
1978	14.91	14.50	14.64	13.88	14.72	13.54	14.86	13.92	NA	12.83
1977	15.20	14.21	14.63	13.80	14.87	13.75	15.25	13.61	NA	13.13
1976	13.81	13.57	13.82	12.82	13.58	NA	13.80	13.04	NA	11.80
1975	12.72	12.72	13.79	12.21	12.35	NA	12.62	12.30	NA	11.65

(a) Does not include supplemental costs; (b) Preliminary estimates; (c) No crude has been imported from Iran since February, 1980.
Source: Department of Energy, Monthly Energy Review, March, 1983.

International Prices for Gasoline and Fuel Oil

(U.S. dollars per gal. for gasoline; per 42-gal. bbl. for fuel oil)

	1/1/82				7/1/81				1/1/81			
	Gasoline		Fuel Oil		Gasoline		Fuel Oil		Gasoline		Fuel Oil	
Country	Reg.	Prem.	Dist.	Resid.	Reg.	Prem.	Dist.	Resid.	Reg.	Prem.	Dist.	Resid.
WESTERN HEMISPHERE												
Argentina	x	x	x	x	1.29	1.56	2[illegible].05	13.82	2.15	2.63	32.87	25.45
Bolivia	.91	1.06	34.98	x	.92	1.40	34.98	x	.76	.91	31.91	25.44
Brazil	—	—	—	—	—	—	—	—	2.52	x	x	24.73
Canada	x	x	x	x	1.16	1.26	x	x	.98	1.06	25.42	18.90
Chile	x	x	x	x	1.91	2.07	58.47	42.12	1.74	2.00	x	28.64
Colombia	.94	1.10	19.74	x	.81	.96	19.74	x	.86	1.03	x	36.18
Dominican Republic	x	2.57	47.23	30.36	x	2.57	47.04	30.24	x	2.39	39.67	22.82
Ecuador	—	—	—	—	—	—	—	—	.60	.80	x	11.76
El Salvador	2.90	2.98	38.13	x	2.49	2.56	32.76	x	2.49	2.56	x	x
Jamaica	2.12	2.17	55.15	34.03	2.17	2.17	55.15	34.03	2.12	2.17	53.26	38.39
Mexico	.87	1.45	15.23	3.19	.44	1.10	6.62	2.99	.45	1.13	x	2.45
Panama Republic	2.18	2.32	38.90	x	2.12	2.26	38.59	x	2.04	2.17	x	x
Paraguay	3.30	4.21	68.77	55.52	3.61	4.51	68.77	55.52	3.61	4.51	68.77	55.52
Peru	.94	1.13	x	x	.91	1.10	16.80	17.22	.69	.84	15.73	10.41
United States	1.22	1.35	45.15	27.26	1.25	1.36	45.23	26.52	1.24	1.34	43.93	31.35
Uruguay	3.36	4.14	x	33.22	3.35	4.17	x	33.30	3.31	4.11	x	32.93
Venezuela	.13	.31	2.03	1.50	.13	.31	2.03	1.60	.13	.31	2.44	1.68
WESTERN EUROPE												
Austria	2.64	2.76	x	34.84	2.16	2.32	x	32.18	2.46	2.65	48.62	35.78
Belgium	2.77	2.79	59.62	31.07	2.71	2.80	49.81	33.95	2.91	3.00	53.84	43.28
Denmark	2.86	2.90	71.06	47.20	2.85	2.89	66.63	50.05	3.09	3.13	43.41	x
Finland	2.68	2.79	79.84	28.57	2.77	2.88	82.46	30.25	3.03	3.15	53.58	34.78
France	—	—	—	—	—	—	—	—	2.82	2.99	32.12	35.29
Germany, West	—	—	—	—	—	—	—	—	2.33	2.43	x	34.33
Greece	x	x	x	x	2.11	2.37	47.09	22.57	2.58	2.91	54.23	29.16
Ireland	—	—	—	—	—	—	—	—	2.50	2.54	54.05	38.85
Italy	x	x	x	x	2.73	2.84	47.04	32.84	3.28	3.38	32.88	35.98
Luxembourg	2.26	2.34	55.04	28.82	1.99	2.05	46.34	31.14	2.26	2.34	54.78	44.30
Netherlands	2.59	2.50	x	x	2.49	2.58	x	x	2.65	2.71	47.95	35.00
Norway	2.84	2.89	x	39.62	2.68	2.73	x	38.35	2.93	2.99	x	x
Portugal	3.14	3.37	68.40	29.63	2.75	2.99	56.46	20.29	3.25	3.54	49.00	25.24
Spain	2.56	2.88	71.21	32.63	2.53	2.84	70.19	29.69	2.76	3.11	x	36.04
Sweden	x	x	x	x	2.61	2.66	54.72	52.88	2.75	2.80	53.59	47.88
Switzerland	x	x	x	x	2.47	2.49	x	30.95	2.56	2.58	46.03	38.78
Turkey	1.47	1.62	41.07	27.27	1.56	1.74	46.00	29.83	x	x	x	x
United Kingdom	2.46	2.50	x	44.95	2.62	2.65	x	43.64	2.51	2.52	50.53	36.01
Yugoslavia	2.66	2.86	59.10	54.04	x	x	x	x	2.80	3.12	55.52	53.00
MIDDLE EAST												
Iran	x	x	x	x	1.62	2.16	4.08	x	1.62	2.16	4.08	x
Israel	1.84	2.08	58.88	33.93	2.02	2.12	47.20	28.23	2.92	3.07	49.10	31.75
Lebanon	x	x	x	x	x	.99	x	16.38	x	x	x	x
Saudi Arabia	x	x	x	x	.18	.24	x	x	.23	.25	x	x
AFRICA												
Ethiopia	2.18	2.36	46.58	x	2.18	2.36	x	x	1.38	1.65	x	x
Ghana	3.42	3.72	58.02	43.39	3.63	3.94	58.03	43.39	3.12	3.42	58.02	49.39
Kenya	x	x	x	x	2.55	2.74	42.15	29.49	2.34	2.66	41.92	33.64
Morocco	x	x	x	x	2.61	2.75	61.37	28.10	2.93	3.10	x	29.30
South Africa, Republic of	2.27	2.30	72.56	35.77	2.20	2.23	67.76	38.82	2.53	2.59	81.70	44.27
Tunisia	1.95	2.06	x	15.24	x	x	x	x	2.07	2.20	14.28	12.24
ASIA-PACIFIC												
Australia	x	x	x	x	1.77	1.83	60.15	x	1.57	1.87	51.50	x
Burma	x	x	x	x	.39	x	11.73	x	.42	x	x	x
India	2.53	2.60	41.82	35.09	2.45	2.53	44.77	37.56	x	x	x	x
Indonesia	x	x	x	x	.91	1.33	13.36	11.45	.91	1.33	11.40	11.40
Japan	2.74	2.91	74.20	42.04	2.55	2.72	67.75	37.67	2.74	2.93	52.47	44.52
Korea (South)	4.06	5.82	x	48.73	x	x	x	x	x	x	x	x
Pakistan	1.93	2.19	x	19.48	1.91	2.16	x	20.08	1.91	2.11	x	18.96
Philippines	2.36	2.45	40.83	40.83	2.40	2.50	41.60	41.60	2.35	2.45	37.20	37.20
Singapore	x	x	x	x	1.77	1.91	50.00	x	1.71	1.85	x	x
Sri Lanka	x	x	x	x	x	2.00	55.51	29.61	x	1.98	39.47	31.76
Thailand	1.87	2.21	49.11	30.28	2.05	2.14	53.78	33.16	2.13	2.22	36.97	34.99

(x) = not reported; (—) = not listed in 1982 summaries.

Source: 1981 International Energy Annual, Department of Energy, September, 1982. Gasoline and fuel oil prices are for the capitals of each country involved, except the U.S., which is the national average for the month. All gasoline prices are pump retails and include taxes and custom duties.

International Prices of Diesel Fuel and Household Kerosine

(U.S. cents per gal.)

Country	Auto Diesel 1/1/82	Auto Diesel 7/1/81	Household Kerosine 1/1/82	Household Kerosine 7/1/81
Western Hemisphere				
Argentina	x	.60	x	.94
Bolivia	.91	.91	.61	.61
Brazil	—	—	—	—
Canada	x	1.21	x	.81
Chile	x	1.70	x	1.29
Colombia	.94	.81	.94	.81
Dominican Republic	1.15	1.15	.92	.97
Ecuador	—	—	—	—
El Salvador	1.98	1.70	1.84	1.58
Jamaica	1.35	1.35	1.16	1.16
Mexico	.36	.16	.22	.24
Panama Republic	1.40	1.33	1.30	1.29
Paraguay	1.74	1.74	2.10	2.10
Peru	.65	.58	.19	.16
United States	1.05	1.04	1.12	1.10
Uruguay	1.69	1.70	1.80	1.81
Venezuela	.09	.09	.09	.09
Western Europe				
Austria	2.49	2.23	4.02	3.57
Belgium	2.20	1.91	1.47	1.24
Denmark	1.86	1.75	1.67	1.58
Finland	1.93	2.00	1.47	1.57
France				
Germany, West				
Greece	x	1.12	x	1.43
Ireland				
Italy	x	1.26	x	1.06
Luxembourg	1.71	1.34	1.34	1.14
Netherlands	1.81	1.76	1.62	1.56
Norway	1.63	1.52	1.57	1.46
Portugal	1.63	1.34	1.63	1.34
Spain	1.70	1.67	1.74	1.71
Sweden	x	1.34	x	1.40
Switzerland	x	2.34	x	x
Turkey	.98	1.10	1.01	1.13
United Kingdom	2.50	2.69	1.46	1.39
Yugoslavia	2.41	x	2.26	x
Middle East				
Iran	x	x	x	.14
Israel	1.49	1.21	1.37	1.20
Lebanon	x	x	x	.55
Saudi Arabia	x	.08	x	.15
Africa				
Ethiopia	1.44	.99	1.20	1.20
Ghana	2.57	2.73	1.51	1.67
Kenya	x	1.78	x	1.20
Morocco	x	1.46	x	1.46
South Africa, Rep. of	2.30	2.22	1.49	1.39
Tunisia	x	x	.44	x
Asia-Pacific				
Australia	x	1.90	x	1.51
Burma	x	.28	x	.28
India	1.26	1.19	.75	.73
Indonesia	x	.32	x	.23
Japan	1.95	1.73	1.53	1.40
Korea (South)	1.53	x	1.60	x
Pakistan	1.20	1.17	1.05	1.05
Philippines	1.45	1.48	1.46	1.49
Singapore	x	1.23	x	1.21
Sri Lanka	x	1.19	x	.78
Thailand	1.21	1.33	1.01	1.10

Source: 1981 International Energy Report, Department of Energy, September, 1982.
See footnote on preceding table.

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Station Population Falls 4.3% in 1982

There is good news and bad news in the government's annual report on the U.S. service station population. The bad news is that, as expected, the population continued to decline in 1982. The good news is that the outlook for 1983, while still on the negative side, is not all that bad.

A 1981/1982 recap and the latest projections for 1983 were released at the end of January by the Bureau of Industrial Economics of the U.S. Department of Commerce. Between the U.S. Census Bureau's quinquennial nose counts, these numbers are considered the most reliable barometer of trends and totals in the industry.

The 1982 service station population was estimated to be 144,690 outlets. The decline in numbers from 1981's 151,253 stations was steeper than had been projected. In January of 1982, the bureau forecast that the population would fall no lower than 147,000 by the end of the year.

Thus, more than 6,500 service stations dropped out of the picture during the year just ended, for a 4.3% decline.

Although the government gave no reason for the continued decline, it can be assumed that supplier withdrawals, credit card finances, inflation and recession, glutted markets, sagging prices and miserable margins all contributed to the problem.

The peak year for service stations was 1972, when 226,500 outlets were counted. So, with only 144,690 outlets in 1982, more than 81,000 service stations have disappeared in the last 10 years—a decline of 36%.

The outlook for 1983, while still glum, is better. The federal government anticipates that the population shrinkage will slow, and that by December 31, there will be about 139,250 service stations—about 5,400 less than in 1982.

There are several things to remember, however, when interpreting the population figures.

First, as many of these stations disappear, they are replaced by units which pump more gasoline. Smaller stations are being "traded in" on bigger volume outlets. In other words, four or five 10,000 to to 25,000-gal. a month stations may drop by the wayside, but they are being replaced by one 200,000-gal. a month pumper.

Second, these totals reflect only those units defined as "service stations" by the Census Bureau—stations which generate more than 50% of their income from the sale of petroleum products and services.

In real life, there are thousands of convenience stores, garages, mass merchandisers and other places that sell gasoline, but do not fit the "service station" definition.

It is hard—if not impossible—to come up with an accurate count of those additional outlets simply because no one has ever found a way to define, find and tally them.

Convenience store sources estimate their world to be 35,000 to 40,000 units, about half of which (approximately 17,500) sold gasoline in 1982. When the C-store numbers are added in, the gasoline station population increases to at least 162,000 outlets in 1982 and to 157,000 or more in 1983.

Industry experts also assume there are at least 10,000 more gasoline dispensers at mass merchandisers like Sears Roebuck, and at garages, fleet operations, and rural co-ops.

Here again, the population total could be upgraded—to around 172,000 outlets in 1982 and about 167,000 in 1983.

So, overall, the station population, while shrinking constantly, is not really shrinking as fast as it seems.

The bureau's 1982 and 1983 numbers bring good news in the dollar department: Gross sales are increasing, and the bureau estimates industry sales were $106.5-billion in 1982 (up from $101.6-billion in '81) and will be 114.5-billion for 1983.

Comparable U.S. Census Bureau Data (a)

	1977	1972*	1967	% Chng. '77 v. '72	% Chng. '72 v. '67
No. of stations (b)	176,465	226,459	216,059	−22.1%	+4.8%
Total sales ($000,000) ...	$56,468	$33,655	$22,709	+67.8	+48.2
Average per station......	$320,000	$148,600	$105,106	+115.3	+41.4
No. of employees........	672,673	747,688	575,207	−10.0	+30.0

(a) Censuses are made every five years; 1982 census data will not be available until late 1983 and/or early 1984; (b) As above, 50% or more of their income from sale of petroleum products; *Special note, 1972 was the peak year. Source: U.S. Department of Commerce, Censuses of Retail Trade for 1967, 1972 and 1977.
For detailed census reports on 1977, see NPN Factbook Issue, Mid-June, 1980.

The Rise and Fall of U.S. Service Stations

	No. of Stations (a)			Sales ($000,000)		
Year	Total	Company-owned	Franchisee-owned	Total	Company-owned	Franchisee-owned
1983	139,250	25,065	114,185	$114,534	$20,616	$93,918
1982	144,690	26,044	118,646	106,544	19,178	87,366
1981	151,250	27,225	124,025	105,145	18,926	89,219
1980	158,540	30,122	128,418	96,338	18,304	78,034
1979	164,780	31,310	133,480	71,894	13,660	58,234
1978	172,300	32,737	139,563	60,884	12,177	48,707
1977	176,465	33,375	141,160	58,231	11,646	46,585
1976	186,840	37,368	149,472	53,416	10,683	42,733
1975	189,480	37,896	151,584	47,387	9,477	37,910
1974	196,130	39,226	156,904	43,829	8,766	35,063
1973	215,880	47,176	172,704	37,666	7,533	30,183
1972	226,459	44,200	176,259	33,656	6,812	26,844
1971	220,000	44,000	176,000	31,149	6,230	24,919
1970	222,000	44,400	177,600	29,340	5,868	23,472

(a) As defined by U.S. Census Bureau, stations with 50% or more of their income from sales petroleum products. Source: "Franchising in the Economy, 1981-1983," U.S. Department of Commerce, January, 1983.

Service Station Population Dips Again

				Percent Changes	
	1983	1982	1981	1982-83	1981-82
Number of establishments .	139,250	144,690	151,250	−3.8%	−4.3%
Company-owned	25,065	26,044	27,225	−3.8	−4.3
Franchisee-owned	114,185	118,646	124,025	−3.8	−4.3
Total sales of products and services (Add 000,000).	$114,534	$106,544	$101,665	7.5	4.8
Company-owned	20,616	19,178	18,300	7.5	4.8
Franchisee-owned	93,918	87,366	83,365	7.5	4.8
Average per station	$822,000	$736,000	$672,000	+11.7	+9.5
No. of employees........	NA	NA	570,900		

(a) As of Dec. 31 of each year; (b) Service stations as defined by U.S. Census Bureau, i.e., stations with 50% or more of their income being derived from the sale of petroleum products.
Source: "Franchising in the Economy, 1981-1983," "Bureau of Industrial Economics, U.S. Department of Commerce, January, 1983.

Service Station Population by States

1983 vs. 1977

The U.S. Census Bureau made its quinquennial survey of retail businesses in 1982, but since that data will not be available until late 1983 or early 1984, NPN's annual projections based on the 1977 data continue to be best estimates of the service station population on state-by-state levels. On a percentage basis, the national population dipped 4.3% in 1982 and is expected to slip another 3.8% by the end of this year. But with fewer stations, the dollar volume at service stations is again increasing, as indicated in the table below.

	Total Gasoline Service Stations				Total Dollar Sales (Add 000)			
	1983(a)	1982(a)	1981(a)	1977(b)	1983(a)	1982(a)	1981(a)	1977(b)
Alabama	2,809	2,920	3,051	3,562	$1,710,158	$1,590,845	$1,517,982	$ 810,443
Alaska	165	171	179	211	217,016	201,875	192,629	102,845
Arizona	1,305	1,357	1,418	1,656	1,375,026	1,279,094	1,220,510	651,625
Arkansas	1,898	1,973	2,062	2,407	1,045,707	975,750	928,197	495,560
California	11,342	11,790	12,320	14,388	12,696,876	11,252,908	10,737,508	5,732,696
Colorado	1,959	2,036	2,127	2,485	1,494,071	1,389,833	1,326,177	708,010
Connecticut	1,746	1,815	1,897	2,215	1,717,808	1,597,961	1,524,772	814,068
Delaware	343	357	373	435	340,810	317,033	302,512	161,511
District of Columbia	197	205	214	250	290,938	270,640	258,244	138,354
Florida	5,745	5,972	6,240	7,287	5,035,807	4,684,472	4,469,916	2,386,463
Georgia	3,993	4,151	4,337	5,066	2,169,256	2,017,912	1,952,489	1,350,915
Hawaii	327	340	355	415	371,553	345,630	329,800	176,079
Idaho	654	680	711	830	470,466	437,643	417,598	222,954
Illinois	6,160	6,403	6,691	7,815	6,418,238	5,970,454	5,696,998	3,040,967
Indiana	3,819	3,970	4,148	4,867	3,591,233	3,340,682	3,187,674	1,701,885
Iowa	2,699	2,806	2,933	3,424	2,013,240	1,872,781	1,787,005	954,073
Kansas	1,944	2,021	2,112	2,466	1,395,687	1,298,314	1,238,849	661,416
Kentucky	2,721	2,829	2,956	3,452	2,153,774	2,003,511	1,911,747	1,020,672
Louisiana	2,357	2,450	2,560	2,989	1,811,059	1,684,706	1,607,544	858,259
Maine	736	765	799	933	514,893	478,971	457,033	244,009
Maryland	1,943	2,020	2,111	2,465	2,553,153	2,375,026	2,266,246	1,209,948
Massachusetts	3,060	3,181	3,324	3,882	2,721,496	2,531,624	2,415,672	1,289,715
Michigan	5,181	5,386	5,628	6,572	5,467,116	5,085,689	4,852,757	2,590,860
Minnesota	2,586	2,688	2,809	3,280	2,497,984	2,323,706	2,217,277	1,193,895
Mississippi	1,547	1,608	1,680	1,962	958,302	891,443	850,614	454,139
Missouri	3,950	4,106	4,290	5,008	3,158,409	2,938,055	2,803,488	1,496,768
Montana	762	792	828	968	574,310	534,242	509,773	272,166
Nebraska	1,365	1,419	1,483	1,732	1,112,161	1,034,569	987,184	529,836
Nevada	505	525	549	641	621,612	578,243	551,759	294,582
New Hampshire	555	577	603	704	500,639	465,710	444,380	237,251
New Jersey	4,217	4,384	4,581	5,350	3,805,914	3,540,385	3,378,230	1,803,619
New Mexico	1,096	1,139	1,190	1,389	773,026	719,094	686,158	366,336
New York	7,289	7,577	7,917	9,245	6,106,579	5,680,538	5,420,361	2,893,091
North Carolina	4,553	4,733	4,946	5,775	2,870,043	2,669,807	2,547,526	1,360,111
North Dakota	543	564	589	687	425,202	395,537	377,421	201,503
Ohio	6,952	7,227	7,552	8,820	6,576,909	6,118,055	5,837,839	3,116,790
Oklahoma	2,414	2,509	2,622	3,063	1,382,792	1,286,318	1,227,403	655,239
Oregon	1,724	1,792	1,872	2,185	1,381,704	1,285,306	1,226,437	654,788
Pennsylvania	7,091	7,371	7,702	8,994	6,028,665	5,608,061	5,351,203	2,856,978
Rhode Island	548	570	596	697	456,777	424,908	405,447	216,467
South Carolina	2,353	2,459	2,570	3,001	1,522,929	1,416,678	1,351,792	721,715
South Dakota	677	704	736	861	508,047	472,602	450,956	240,764
Tennessee	3,224	3,351	3,502	4,090	2,428,270	2,258,856	2,155,397	1,150,756
Texas	10,050	10,447	10,916	12,747	7,268,074	6,760,999	6,451,335	3,444,333
Utah	906	942	984	1,149	774,680	720,640	687,634	367,125
Vermont	425	442	462	540	294,470	273,925	261,379	139,550
Virginia	3,147	3,271	3,418	3,992	3,125,426	2,907,373	2,774,211	1,481,137
Washington	2,355	2,461	2,572	3,005	1,998,307	1,858,890	1,773,750	946,996
West Virginia	1,433	1,490	1,557	1,818	1,041,107	968,471	924,114	493,332
Wisconsin	3,187	3,313	3,462	4,043	2,638,121	2,454,066	2,341,666	1,250,204
Wyoming	509	529	553	647	452,535	420,963	401,682	214,456
Total	**139,066**	**144,588**	**151,200**	**176,465**	**$16,858,375**	**$110,010,794**	**$105,766,505**	**$56,468,144**

(a) Projections by NPN based on Census data and other Commerce Department reports; (b) U.S. Census Bureau Retail Trades Census, 1977.

Source: NPN projections based on Commerce Department data.

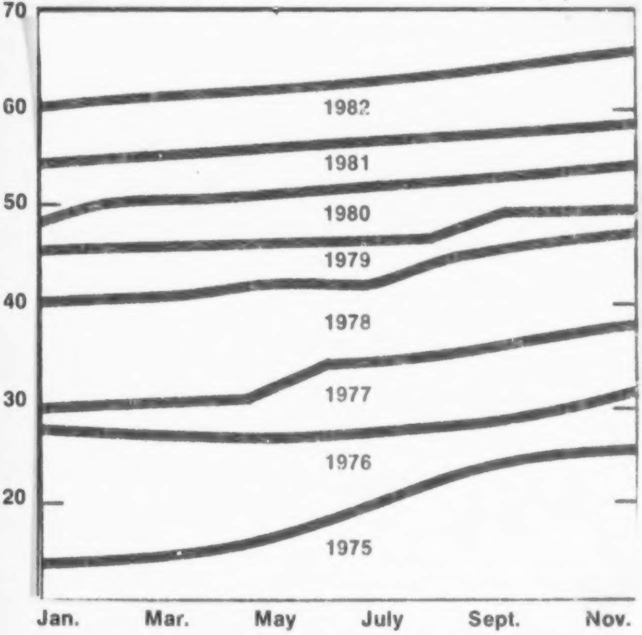
How Self-Service Appeals to Motorists

Self-service gasoline marketing is now far and away the most popular type of motor fuel sales in the U.S., according to two different surveys. An Amoco Oil Co. internal report says self-service volume hit the two-thirds mark by the end of 1982. Lundberg Letter, a market research report, was even stronger. It indicated self-service volume was around 72% by the end of last year.

Self-service marketing is legal in 48 of the 50 states and the District of Columbia. Oregon and New Jersey are the only states that ban self-service. Oregon voters, in a November referendum, failed to approve self-service. In New Jersey, another major fight was underway in the legislature last spring, with retailers fighting the most formidable proposal yet to lift the ban on self-service.

Amoco conducts a regular popularity poll of its motorist-customers to determine their service station preferences. In all but a handful of states, more than half of the motorists voted for self-service in December 1982. The laggard states, if they can be called that, were in the upper Atlantic seaboard—Maine, Vermont, New Hampshire, Massachusetts, New York and Pennsylvania (see table below).

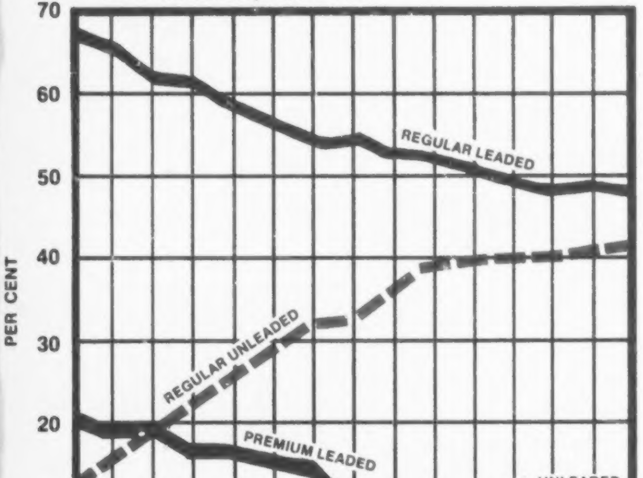
U.S. Self-Serve Motorist Gasoline Market Share (%)



State (a)	% of Buyers	State (a)	% of Buyers
Utah	93	Minnesota	71
Arizona	87	Mississippi	71
Idaho	83	North Dakota	71
South Carolina	83	Indiana	70
California	80	Tennessee	70
New Mexico	80	Missouri	69
North Carolina	80	Arkansas	68
Washington	80	Maryland	66
Colorado	79	South Dakota	65
Texas	79	Nebraska	64
Louisiana	78	Dist. of Col.	63
Wisconsin	78	Ohio	63
Florida	77	Kansas	60
Oklahoma	77	Kentucky	59
Michigan	75	Connecticut	57
Georgia	74	West Virginia	57
Illinois	74	Rhode Island	50
Iowa	74	Pennsylvania	49
Montana	74	New York	46
Virginia	74	Massachusetts	39
Wyoming	74	New Hampshire	37
Nevada	72	Vermont	26
Alabama	71	Maine	25
Delaware	71		

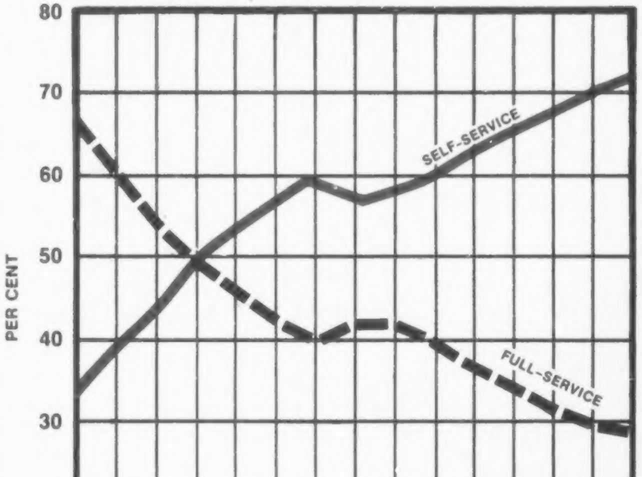
(a) Self-service is illegal in New Jersey and Oregon.
Source: Amoco Oil Co., January, 1983.

HOW GASOLINE MARKET HAS CHANGED, 1975-1982



Source: Lundberg Letter, December 1982.

SELF-SERVICE VERSUS FULL-SERVICE, 1975-1982*



*"Full service" denotes stations at which an attendant fills the tank.
Source: Lundberg Letter, December 1982.

Business at Service Stations

Dollar Volume

Year	No. of service stations	Total sales (add $000,000,000)	Avg. per station (add $000)
1983	**139,250(a)**	**$114.5**	**$822.2**
1982	144.690(a)	106.5	736.1
1981	151,250(a)	101.7	672.4
1980	158,540(a)	96.3	608.0
1979	164,790(a)	70.9	430.0
1978	172,300(a)	60.9	353.0
1977	176,465(b)	56.5	320.0
1976	186,400(a)	48.0	257.0
1975	189,480(a)	43.8	232.0
1972	226,459(b)	33.7	148.8

(a) Franchising in the Economy 1981-1983, U.S. Department of Commerce; data are as of the end of the year.

(b) Bureau of Census definition of gasoline service stations: 50% or more of dollar volume comes from the sale of petroleum products.

Product Sales, Passenger Cars

Year	Privately owned passenger cars (add 000)	Gasoline		Motor oil	
		Avg. gal. per car	Annual retail market (add 000,000 gal.)	Avg. qt. per year	Annual retail market (add 000,000 qt.)
1983	**126,000**	**545**	**68,670**	—	—
1982	124,821	556	69,400	7.3	907
1981	123,462	581	71,731	7.3	909
1980	121,723	603	73,399	7.3	907
1979	120,248	664	79,845	7.3	880
1978	116,534	715	83,760	7.6	921
1977	113,696	706	80,269	7.9	900
1976	110,188	711	78,344	8.0	887
1975	106,712	712	75,979	9.5	1,014
1972	96,567	755	72,908	10.0	966

Source: Federal Highway Administration through 1981: NPN estimates for 1982 and for motor oil.

Station Customers

Year	No. of service stations	Privately owned passenger cars		Households owning cars		Licensed drivers		Women drivers	
		Total (add 000)	Avg. per station	Total (add 000,000)	Avg. per station	Total (add 000,000)	Avg. per station	Total (add 000,000)	Avg. per station
1983	**139,250**	**126,000**	**904.8**	**73.0**	**524.2**	**150.8**	**1,082.9**	**70.9**	**509.2**
1982	144,690(a)	124,821	862.7	72.0	497.6	149.1	1,030.5	70.4	486.6
1981	151,250(a)	123,462	816.3	70.0	460.5	147.0	969.0	69.2	457.5
1980	158,540(a)	121,723	767.8	67.2	423.8	145.3	916.7	68.1	429.5
1979	164,790(a)	120,248	731.1	65.9	400.0	143.3	868.3	66.8	403.5
1978	172,300(a)	116,534	676.3	64.6	375.0	140.8	817.1	65.3	379.0
1977	176,465(a)	113,696	644.3	63.3	365.5	138.4	784.4	63.7	361.0
1976	186,400(a)	110,188	591.1	62.0	332.6	130.3	689.4	57.9	306.3
1975	189,460(a)	106,712	563.2	60.5	319.3	127.8	662.2	56.8	294.3
1972	226,459(b)	96,567	426.4	52.8	232.2	118.4	522.8	52.6	232.3

(a) Franchising in the Economy 1981-1983, Department of Commerce.

(b) Bureau of Census definition of gasoline service stations: 50% or more of dollar volume comes from the sale of petroleum products.

Source: Based on data from Motor Vehicle Mfgs. Assn., Federal Highway Administration, and NPN estimates for 1982 and 1983.

How Stations Rank in Sales

(Billions of Dollars)

	1982	%Change '82-'81	1981	%Change '81-'80	1980	%Change '80-'79	1979	%Change '79-'78
All Retail Stores	$1,070.2	3.0%	$1,038.8	9.1%	$951.9	6.4%	$894.3	12.0%
Food Group	249.9	5.2	237.6	9.5	217.0	10.8	195.8	12.2
Automotive Group	189.3	4.8	180.7	11.3	162.3	(8.5)	177.3	8.3
General Merchandise	131.5	3.1	127.5	8.8	117.2	6.8	109.7	10.3
Eating and Drinking Places	103.6	10.1	94.1	9.7	85.8	7.8	79.6	8.4
Gasoline Service Stations	**98.1**	**(3.5)**	**101.7**	**8.7**	**93.6**	**27.9**	**73.2**	**20.2**
Apparel Group	94.2	2.9	47.8	7.7	44.4	4.7	42.4	12.2

Source: Survey of Current Business, Department of Commerce, Vol. 63, No. 1, January, 1983.

Personal Consumption Expenditures

	(Billions of Dollars)					Seasonally Adjusted at Annual Rate—1982			
	1982	%Change '82-'81	1981	%Change '81-'80	1980	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Total Expenditures	$1,972.0	7.0%	$1,843.2	10.2%	$1,672.8	$1,919.4	$1,947.8	$1,986.3	$2,034.6
Durable Goods	242.7	3.5	234.6	10.7	211.9	237.9	240.7	240.3	251.7
Automobiles	106.2	7.7	98.6	9.7	89.9	103.2	103.3	104.3	114.1
Furniture	92.7	(0.7)	93.4	10.4	84.6	91.0	93.2	92.7	94.0
Other Durable	43.7	2.6	42.6	15.1	37.0	43.7	44.2	43.3	43.6
Nondurable Goods	762.7	3.8	734.5	8.7	675.7	749.1	755.0	768.4	778.3
Food	397.8	6.0	375.3	8.6	345.7	387.9	395.0	401.3	406.8
Clothing and Shoes	118.6	3.5	114.6	9.4	104.8	117.5	118.4	119.1	119.5
Gasoline and Oil	**93.9**	**(3.0)**	**96.8**	**8.8**	**89.0**	**95.3**	**91.3**	**94.2**	**94.9**
Fuel Oil and Coal	17.6	10.7	19.7	0.5	19.8	17.3	17.3	18.4	17.6
Other Nondurable	152.4	3.0	147.9	8.6	136.2	148.4	150.4	153.8	157.2
Services	966.6	10.6	874.1	11.3	785.2	932.4	952.1	977.6	1,004.5

Source: Survey of Current Business, Department of Commerce, Vol. 63, No. 1, January, 1983.

New Stations vs. Closed Stations

	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973
New Stations	326	341	169	286	353	284	319	206	206	1,177
Deactivated Stations	3,710	4,538	3,380	3,724	5,138	5,683	5,676	4,127	6,041	9,342

(a) API definitions: A service station is defined as a retail outlet at which 50% of the dollar volume is from gasoline and related products; a newly constructed outlet is defined as one that has been erected completely on vacant land or is new on the site. This category does not include rebuilds. Permanently deactivated outlets are those where equipment and identification have been removed, and where re-opening as a service station is no longer contemplated.

Source: American Petroleum Institute, New Construction Report, March, 1983.

Keeping track of service station additions and deletions is like watching a fisherman's bobbin on rippling waters: It's really hard to tell when the movement is up or down. National data show that the service station population is declining. But these figures are based on percentages rather than nose counts. American Petroleum Institute, on the other hand, gets confidential reports from 28 or so companies on new construction and deactivations during the calendar year (above).

The figures show that new construction slowed down again in 1981—a total of 326 new stations versus 341 in 1981. The bottom year seems to be 1980, when only 169 stations were constructed. The peak year was back in 1972 when more than 1,600 new stations were added to the nation's total.

Deactivations declined in 1982 also, a substantial 18.2% decrease from 1981. But then again, the 1981 total was up 34% over the 1980 total of 3,380. The peak year for deactivations came in 1973 in the fallout of the oil embargo when 9,342 stations were cast aside by the companies participating in the API construction/deactivation survey.

The figures themselves are deceiving, however. As indicated in the footnote, they do not include rebuilt or modernized stations, or those that have replaced razed units.

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Credit-Card Sales—Boom or Bust Coming Up?

With the surcharge, free-card and no-card policies of a number of majors, the oil company credit card picture changed vastly in 1982. But figures just compiled and released for 1981 offer an appropriate benchmark for comparing results of these new company tactics.

As results become known, it may be that 1981 was the oil industry's banner year in the credit card sales department, with various new policies tending to dampen the volume of card transactions.

The Nilson Report, a private letter to top merchandising executives, isn't all that pessimistic, however. This is what it had to say in its December 1982 special report on the oil industry:

"Compared to 119-million in 1979, oil company credit cards in circulation at the end of 1981 totaled 101.2-million, which was the low point of the past decade.

"The industry is expected to gain back another 10-million or so as companies prepare to convert as many credit cards as possible to electronic payment cards.

"Credit cards, cash discounts and full service at service stations are on the way out, but not immediately, as these changes can't take place until the petroleum industry goes through a major marketing and technological revolution over the next five years.

"Within three years, 90% of all gasoline dispensed at service stations will be self-service. By 1987, all of the major petroleum marketers will have phased out 85% of their credit systems in favor of debit-card systems and at least 10% of all gasoline dispensed at self-service stations will be activated by plastic cards.

"Within 10 years, all but a few stations will be using card-controlled fuel systems exclusively and will run completely unattended."

In 1981, according to *The Nilson Report*, Texaco still had more credit cards in use than any other oil company, but Exxon's plastic garnered the No. 1 spot in dollar volume of sales.

Approximately $25-billion in oil company credit card sales were reported by the top 20 issuers in 1981—with the number of cards outstanding totaling 101-million, 18-million less than in 1979. [See 1982 *NPN Factbook*, Page 103]

The latest Nilson survey is the first issued in about two years, making 1979 the last previous year for which industry-wide statistics were recorded.

Taking note of the many changes which occurred in 1982, including Arco's abandonment of its credit card, publisher Spencer Nilson acknowledges that the contemporary credit card situation is in such a state of flux that it is almost impossible to keep track.

Nilson doesn't foresee the day coming when all major oil companies will do as Arco did. Nor is he convinced that the discount-for-cash programs contrived by Exxon, Mobil, Amoco and others will last for long.

"Credit cards will always play a role in oil marketing," he says. "As for cash discounts, I don't know of any industry where they lasted forever. Supply-demand factors eventually even these things out."

In addition to the $25-billion in sales on oil company cards, sales generated by bank cards and travel/entertainment cards such as American Express brought 1981's grand total of oil-channel credit card sales to $26.9-billion. The more or less comparable figure in 1979, according to Nilson's data, was $23-billion—revealing a 17% rise in card revenues for the two-year period.

Texaco, which reported a total of 17.7-million credit cards in use in 1979, had only 13-million active cards in 1981. A company spokesman explains that this apparently resulted from re-issuance of cards with two-year expiration dates and the weeding out of cardholders who had not used their accounts during that period.

Amoco, Exxon, Shell, Mobil and Gulf, respectively, were next in line in the first half dozen.

In dollar sales, however, Exxon topped them all with a volume of $3.5-billion.

Amoco was next, only a hoot and holler away. Others in the $1-billion-plus class were, in descending order, Shell, Texaco, Mobil, Chevron, Gulf, Union, Arco and Standard of Ohio.

20 Largest Oil Company Card Issuers—1981

	Oil Company Credit Cards						
Oil Companies	**Total Cards (millions)**	**Total Accounts (millions)**	**Accounts Billed Monthly (millions)**	**Sales Volume ($millions)**	**Bank Card Sales Volume ($millions)**	**T&E Card Sales Volume ($millions)**	**Total Credit Sales ($millions)**
Texaco	13.00	7.00	3 00	$ 2,600.00	—	—	$ 2,600.00
Amoco	12.50	6.90	3.60	3,300.00	—	$20.00	3,320.00
Exxon	11.90	6.60	3.60	3,500.00	—	—	3,500.00
Shell	11.50	6.00	3.50	2,700.00	$ 400.00	—	3,100.00
Mobil	11.30	5.80	3.00	2,500.00	—	—	2,500.00
Gulf	10.00	5.00	2.30	2,100.00	—	—	2,100.00
Chevron	8.00	4.30	2.60	2,400.00	400.00	—	2,800.00
Union	5.90	3.50	2.10	1,800.00	274.00	—	2,074.00
Sunoco/DX	4.80	3.00	1.00	750.00	110.00	35.00	895.00
Phillips	3.70	2.20	.90	780.00	195.00	—	975.00
Sohio	2.10	1.20	.90	1,100.00	69.00	—	1,169.00
Citgo	1.60	1.00	.40	270.00	80.00	—	350.00
Conoco	1.30	1.00	.40	310.00	25.00	—	335.00
Marathon	.80	.50	.20	150.00	—	—	150.00
Diamond	.70	.50	.10	140.00	30.00	10.00	180.00
Fina	.60	.40	.20	162.00	—	—	162.00
Total	.50	.30	.20	215.00	145.00	—	360.00
Champlin	.40	.20	.07	67.00	20.00	—	87.00
Kerr-McGee	.40	.20	.08	79.00	18.00	—	97.00
Ashland	.20	.10	.06	57.00	60.00	—	117.00
Totals	**101.20**	**55.70**	**28.41**	**$24,980.00**	**$1,826.00**	**$65.00**	**$26,871.00**

Cards discontinued in 1982: Arco—6,000,000; Getty—1,200,000; Pennzoil—8,000.
Source: The Nilson Report, December, 1982.

Convenience Store Gasoline Sales Grow 21.4% in 1982

For the seventh year in a row, retail gasoline operations in the convenience store industry have proved to be such a dynamic force that they may one day dominate the small-food-store universe.

This is becoming more apparent with each annual report of John F. Roscoe's "Dollars Per Day Survey," the latest of which was issued in mid-February. Roscoe is a C-store operator himself, based in Concord, Calif. His chain includes 160 stores in five western states [NPN—Jan. '83, p22].

Technically, Roscoe's survey embraces only 11 publicly owned chains. But because the 12,400 stores owned by the chains represent almost one-third of the industry's presumed population of 39,000, they are considered to be a good indicator.

Roscoe's 1982 survey shows that 5,799 of the 12,400 stores, or 46.76%, marketed gasoline in the preceeding 12 months. This is an increase of 2.31% over 1981 totals. Significantly, only 21.16% of the chains' stores retailed gasoline in 1975; thus this percentage has more than doubled in the short space of seven years. [See table on page 110.]

The 11 chains sold 2,112,975,731 gal. of gasoline in 1981 and first-half '82, worth a grand retail total of $2,603,083,648. This is an increase of 12% in gallonage over 1981, and a 21.4% rise in sales dollars.

Among the 11 chains, Dallas-based Southland Corp. ranked No. 1 in the number of stores (7,002); the number of gasoline units (2,517); total gallonage (956-million gal.), and retail dollars ($1.2-billion). Light years away was second-place Munford, Atlanta, Ga., with $335-million in sales. Munford was the only one of the 11 chains to generate fewer sales dollars in 1982 than 1981, falling 5.8%, according to Roscoe.

He notes that 47% of the stores owned by the 11 chains market gasoline. If that percentage is projected to the generally agreed-upon C-store population of about 39,000, more than 18,000 C-stores are selling gasoline nationwide, he concludes. He also theorizes, on the same basis, that C-stores now control 6.98% of the national market.

According to Roscoe's report, gross sales for the 11 chains in 1982 totaled $8.1-billion, of which $5.5-billion was for food and $2.6-billion for gasoline. The year-ago figures were $7.0-billion overall, with $4.8-billion coming from groceries and $2.1-billion from gasoline. Thus, total sales were up 30.7% in 1982, with groceries gaining 13.5% and gasoline dollars up 21.4%.

(Gasoline aside, one of the primary aims of the annual Roscoe report is to rank the chains in terms of their profitability—on a dollars-per-day basis. His formula shows that Shop & Go, of Mango, Fla., was the most profitable chain for the second consecutive year, and for the fourth time in 12 years. It was followed by Circle K, Southland, National Convenience and Lil' Champ among the top five.)

Roscoe noted in his commentary that the C-store industry is experiencing an upheaval similar to what gasoline marketing has seen in recent years:

"Changes in economic conditions and consumer awareness of these changes have forced the companies to re-evaluate their operating practices and expansion plans.

"Almost everyone now believes the operating environment has changed. Some operators accept the facts but are unclear about the solution. Some believe their troubles are caused by general economic conditions and that things will improve once the good old days return.

"Personally, I believe this approach is unjustified. Humpty Dumpty has fallen off the wall, and we'll never put Humpty Dumpty together again."

What the industry must do now is "shuck off the past," he said.

The chains, he added, now know they can't afford to operate old, run-down, low-volume, unprofitable stores. Many of these have been closed. More importantly, the successful chains seem to be replacing these stores with new stores that are generating higher sales volumes.

All this may sound familiar to gasoline marketers who have seen their universe shrink steadily since 1972, with small stations being eliminated and big pumpers springing up in their place.

Said Roscoe, looking ahead: "The future looks much brighter . . . One of the problems of the past has been the ease of entry into the business. That has changed. You can't start one store today for what you could start a hundred-store chain a few years ago.

"It's going to be a better business for those who change and remain in business. There will be fewer stores with bigger sales, higher profits, and lower returns on equity than in the leveraged past."

Nine-Year Box Score on Growth

Survey Year	No. of Stores	Net Growth	No. with Gasoline Units	Gasoline Units Added in Year	% of Stores with Gasoline Units
1982(a)	12,400	107	5,799	393	46.76%
1981	12,445	205	5,533	442	44.45
1980	13,167	247	5,630	447	42.76
1979	12,920	313	5,153	569	39.88
1978	12,597	644	4,584	792	36.38
1977	11,953	360	2,792	959	31.72
1976	11,356	672	2,786	557	24.53
1975	10,143	928	2,147	194	21.16
1974	9,258	1,042	1,964	—	21.21

(a) Data includes either full-year 1981 or half-year 1982 for participating chains, depending upon fiscal years involved.

Source: 12th annual Dollars-Per-Day Survey, John F. Roscoe.

Growth of Gasoline Units in 1982

1982 Profit Ranking	Company	No. of Stores	No. of Gasoline Units	% with Gasoline	Gasoline Units Added in Year	No. of Stores Added in Year
1	Shop & Go	405	268	66%	3	(7)
2	Circle K	1,211	780	64	27	17
3	Southland	7,002	2,517	36	271	107
4	National Convenience	922	585	63	107	90
5	Lil' Champ	162	66	41	22	14
6	Dillon	349	250	72	8	11
7	Li'l General	460	208	45	4	(14)
8	Mini Mart	114	38	33	9	2
9	Sunshine Jr.	354	307	87	19	1
10	Conna	434	309	71	(5)	18
11	Munford	987	471	48	(72)	(132)
Totals		**12,400**	**5,799**	**47%**	**393**	**107**

Source: 12th annual Dollars-Per-Day Survey, John F. Roscoe.

Distribution by Establishments—1981

Size Groups	Franchising Companies Number	Establishments Number	Establishments Per Cent	Sales ($000)	Sales Per Cent
Total	**29**	**15,524**	**100.0**	**8,405,986**	**100.0**
1001 and Greater	4	10,082	65.0	5,816,407	69.2
501 - 1000	4	2,972	19.1	1,369,205	16.3
151 - 500	6	1,808	11.6	983,569	11.7
51 - 150	7	541	3.5	176,273	2.1
11 - 50 0 - 10	8	121	0.8	60,532	0.7

Source: "Franchising in The Economy, 1981-1983." U.S. Department of Commerce, January, 1983.

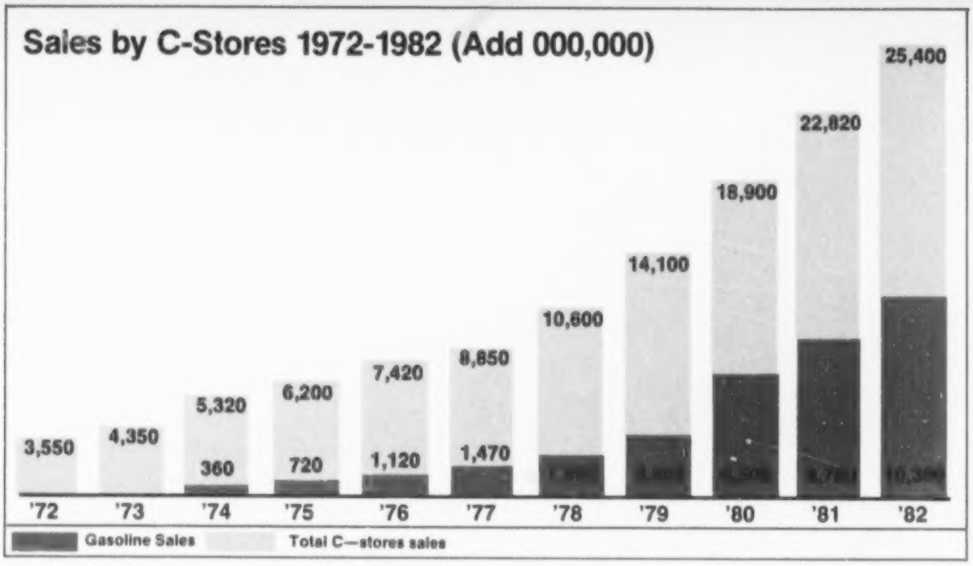
Government Franchise Projections

	1983	1982	1981	Percent Changes 1982-83	Percent Changes 1981-82
Total number of establishments	17,276	16,256	15,524	6.3	4.7
Company-owned	10,205	9,741	9,356	4.8	4.1
Franchisee-owned	7,071	6,515	6,168	8.5	5.6
Total sales of products and services (Add $000,000)	10,168	9,252	8,406	9.9	10.1
Company-owned	5,847	5,359	4,897	9.1	9.4
Franchisee-owned	4,320	3,893	3,509	11.0	11.0

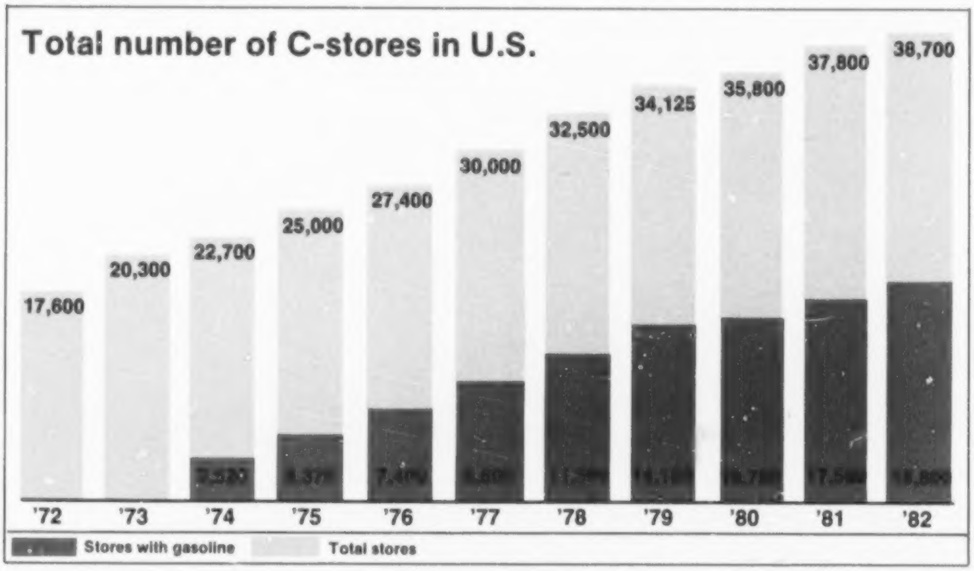
Convenience Store Population—1981

	Population	No. of Households	No. of Convenience Stores	Store Sales (Add 000,000)	
	(Add 000)	(Add 000)		In-Store	Gasoline
New England	**12,439**	**4,492**	**1,776**	**$ 644**	**$ 351**
Maine	1,147	412	128	50	40
New Hampshire	953	343	114	45	35
Vermont	523	188	42	13	11
Massachusetts	5,750	2,072	920	360	150
Rhode Island	949	349	155	44	36
Connecticut	3,117	1,128	417	132	79
Middle Atlantic	**36,713**	**13,490**	**3,555**	**1,609**	**483**
New York	17,445	6,455	962	437	203
New Jersey	7,395	2,704	1,097	564	46
Pennsylvania	11,873	4,331	1,496	608	234
East North Central	**41,914**	**15,123**	**4,596**	**1,736**	**892**
Ohio	10,819	3,923	1,969	776	286
Indiana	5,537	1,993	559	169	168
Illinois	11,480	4,194	755	339	161
Michigan	9,318	3,292	815	325	135
Wisconsin	4,760	1,721	498	127	142
West North Central	**17,358**	**6,427**	**2,424**	**817**	**634**
Minnesota	4,127	1,496	645	212	164
Iowa	2,932	1,085	473	99	121
Missouri	4,967	1,855	587	254	122
North Dakota	661	237	49	12	9
South Dakota	697	254	82	32	26
Nebraska	1,587	598	174	49	50
Kansas	2,387	902	414	159	142
South Atlantic	**38,059**	**13,927**	**9,647**	**2,887**	**2,396**
Delaware	603	217	109	41	19
Maryland	4,262	1,513	570	284	84
District of Columbia	615	262	106	46	10
Virginia	5,465	1,942	1,159	480	234
West Virginia	1,987	725	302	107	98
North Carolina	6,010	2,143	1,434	327	442
South Carolina	3,209	1,087	878	263	262
Georgia	5,619	1,991	1,477	366	374
Florida	10,289	4,047	3,612	973	873
East South Central	**14,977**	**5,303**	**3,184**	**995**	**1,025**
Kentucky	3,736	1,322	698	299	286
Tennessee	4,705	1,714	1,041	350	344
Alabama	3,966	1,397	865	197	229
Mississippi	2,570	870	580	149	166
West South Central	**24,537**	**8,791**	**6,622**	**2,655**	**1,796**
Arkansas	2,348	863	398	101	106
Louisiana	4,305	1,482	847	274	242
Oklahoma	3,110	1,186	1,120	331	326
Texas	14,774	5,260	4,257	1,949	1,122
Mountain	**11,934**	**4,292**	**2,493**	**1,052**	**472**
Montana	804	297	171	57	43
Idaho	987	348	151	71	30
Wyoming	497	180	94	28	21
Colorado	3,009	1,137	537	252	106
New Mexico	1,354	471	352	141	99
Arizona	2,893	1,046	826	353	115
Utah	1,537	488	199	76	37
Nevada	853	325	163	74	21
Pacific	**32,751**	**12,354**	**3,503**	**1,725**	**651**
Washington	4,264	1,609	483	246	115
Oregon	2,723	1,042	421	184	59
California	24,345	9,241	2,452	1,238	460
Hawaii	999	323	72	27	10
Alaska	420	139	75	30	7
Total	**230,682**	**84,199**	**37,800**	**$14,120**	**$8,700**

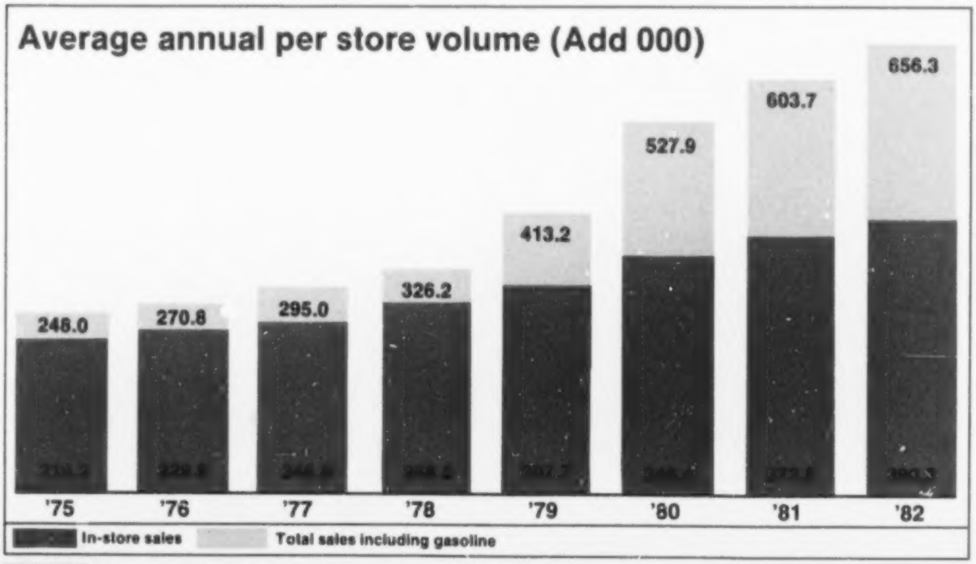
Source: C-Store Business Research and Data Center, October, 1982.



Sales by C-Stores 1972-1982 (Add 000,000)



Total number of C-stores in U.S.



Average annual per store volume (Add 000)

Source: C-Store Business, October 1982.

Oil Jobbers in '82: Some Vital Statistics

A Hunter Publishing Co. survey, completed in April of 1982, confirms that oil jobberships are big dollar-volume businesses. More than one-quarter of the jobbers responding to the Hunter questionnaires said they had annual sales volumes in excess of $10-million. Another 33% said they ranged between $3-million and $10-million a year. Only 13% reported dollar volumes below the $1-million a year mark.

The average jobber in the Hunter/*NPN* sample supplied 20.7 service stations in 1982. Of these, 27.5% were owned and operated by the jobber, 18.4% were owned and leased to others.

Jobbers delivered a mean average of 1,216,600 gal. of gasoline per month. The average jobber owns and operates 16.8 vehicles, including delivery units and passenger cars.

This profile was prepared for Hunter by Great Lakes Marketing, an independent research firm. Great Lakes mailed detailed questionnaires to 2,112 domestic oil jobbers in January and received 1,219 usable responses—a well-above-average response rate of 57.7%. The survey sample was carefully designed to reflect the geographic distribution of the total jobber universe.

Highlights of the survey are as follows:

Jobber Annual Sales Volume

Sales Volume	Number of Respondents	% of Respondents
Under $500,000	51	4.7%
$500,000-$1 million	91	8.3
$1-$3 million	297	27.2
$3-$5 million	165	15.1
$5-$10 million	195	17.9
Over $10 million	292	26.8

Monthly Gasoline Deliveries *(All outlets)*

Gal. Delivered Per Month (Add 000)	Number of Respondents	% of Respondents
Under 60	142	14.8%
60-99.9	105	10.9
100-199	150	15.8
200-299	108	11.2
300-399	76	7.9
400-499	65	6.8
500-699	92	9.5
700-999	60	6.3
1,000-1,999	86	8.9
2,000-2,999	26	2.7
3,000-9,999	37	3.9
10,000 and over	12	1.3
Mean Average		**1,216,600**

Number of Stations Supplied

Number of Stations	Number of Respondents	% of Respondents
None	166	13.5%
1-4	349	28.6
5-9	222	18.2
10-14	135	11.1
15-19	96	7.9
20-29	88	7.2
30-39	51	4.3
40-49	30	2.4
50 and Over	82	6.8
Average		**20.7 Stations Supplied**

Jobber Owned and Operated Stations

Number of Stations	Number of Respondents	% of Respondents
None	513	42.0%
1	283	23.1
2	104	8.5
3	70	5.7
4	48	3.9
5	31	2.5
6	20	1.6
7	19	1.6
8	18	1.5
9	8	.7
Over 10	105	8.9
Mean Average		**5.7**

Jobber Owned Leased Stations

Number of Stations	Number of Respondents	% of Respondents
None	692	56.7%
1	137	11.2
2	95	7.8
3	55	4.5
4	43	3.5
5	37	3.0
6	30	2.5
7	15	1.2
8	16	1.3
9	13	1.1
Over 10	86	7.2
Mean Average		**3.8**

Independently Owned Stations Supplied

Number of Stations	Number of Respondents	% of Respondents
None	427	34.9%
1	132	10.8
2	95	7.8
3	67	5.5
4	68	5.6
5	47	3.9
6	43	3.5
7	33	2.7
8	31	2.5
9	23	1.9
10 and Over	253	20.9
Mean Average		**9.3**

Source: NPN/Hunter Publishing Co., April, 1982.

Average Annual Yields from 1 bbl. of Crude Oil

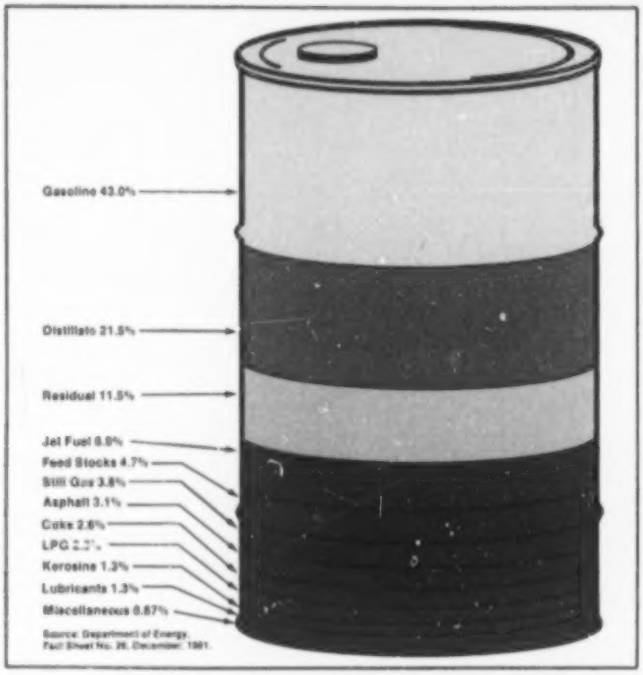
In looking at this annual yield pattern, it must be remembered that some refineries can maximize gasoline production (as high as 60%) and some can maximize fuel oils (as high as 50%), thus varying their output extensively. Data used in this concept are from 1979 averages, as compiled by Department of Energy.

Here are the yields for a standard 42-gal. bbl.:

Product	Gallons	Product	Gallons
Gasoline	18.06	Asphalt	1.30
Distillate	9.03	Coke	1.09
Residual	4.83	LP-Gas	0.97
Jet Fuel	2.90	Kerosine	0.55
Feedstocks	1.97	Lubricants	0.55
Still Gas	1.60	Miscellaneous	0.67

(These yields total 43.52 gal. but are balanced out by the fact that 1.52 gal. of hydrogen are added during the refining processes.)

Legend has it that the 42-gal. bbl. dates back to the 15th century when King Edward IV of Norway standardized the herring barrel at 42 gal. Subsequently this became a standard for whiskey barrels in the U.S. The oil barrel was modeled after that in 1866 for all U.S. shipments. Canada uses an imperial gallon which is larger than the U.S. variety while overseas most countries use the metric system for weights and measures.



Source: Department of Energy, Fact Sheet No. 26, December, 1981.

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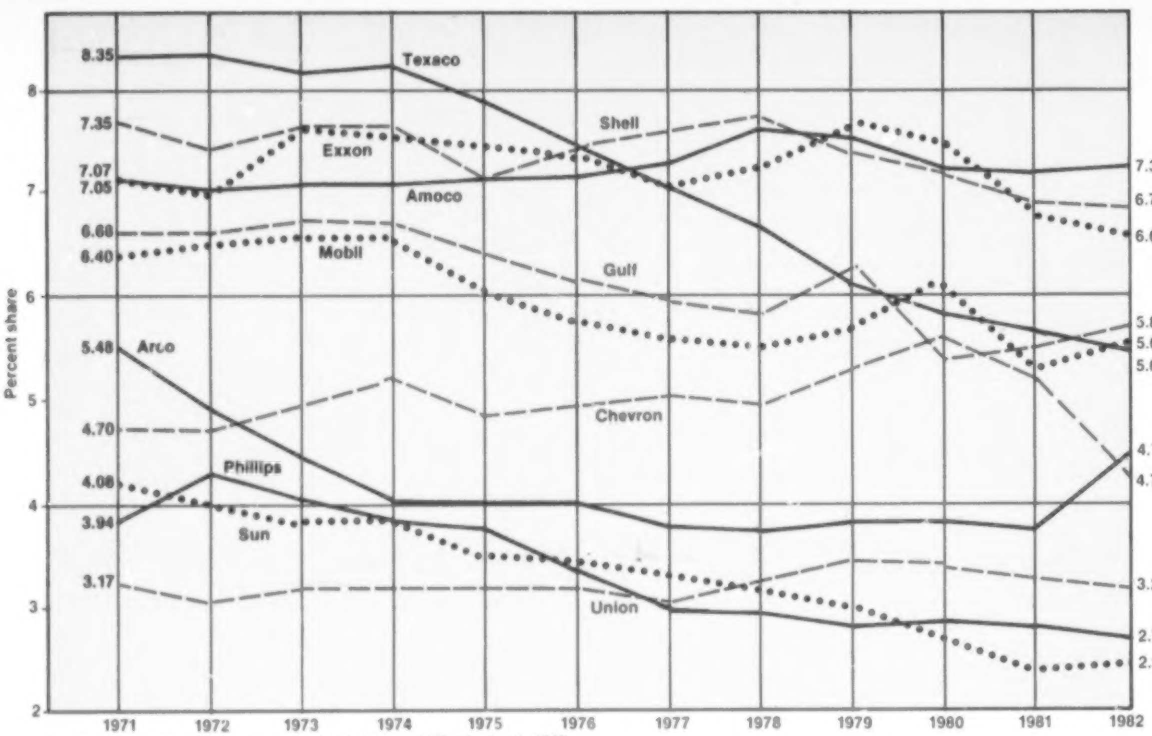


Souce: Lundberg Survey, Inc., North Hollywood, Calif., April, 1983.

Amoco Retains Lead as Top Gasoline Marketer

Despite the fact that it had pulled out of 11 states, Amoco retained its leadership in 1982 as the nation's No. 1 gasoline marketer. It finished well ahead of second place Shell and third place Exxon, which also wound up in that order in 1981. But Shell appeared to be coming on strong in the waning minutes of 1982 so some changes may be in the making for 1983; or, at least, a tighter horse race than the one just ended.

Lundberg Survey, Inc., which keeps tabs on gasoline consumption in the various states and on a company-by-company basis, is the prime authority for statistics on market shares. The illustration above shows the share trends over the past 10 years. Another set of illustrations in this share-of-market report, puts special focus on the eight leaders over the past three years.

Lundberg's preliminary report for 1982 said Amoco had a 7.36% share of the market for that calendar period. Shell had 6.78% and Exxon, 6.64%. Gulf, which had been in fifth place in 1981, moved up to fourth in 1982, leap-frogging Mobil and Texaco. Mobil, with 5.63%, beat out still declining Texaco, which had 5.6%, by a scant margin. Atlantic Richfield, eighth in the 1981, also moved up a notch to seventh, displacing Chevron.

Lundberg also noted that total gasoline consumption declined in 1982 for the fourth consecutive year. Here are the survey's totals (in millions of gal.): 1982[1]—100,690, down 1.6%; 1981—102,317, down 2.8%; 1980—105,228, down 4.7%; 1979—110,407, down 4.3%; and 1978—115,323. The year 1978 was the peak year for gasoline consumption.

Market-share reports are shown in the functional classification developed by Lundberg Survey in 1974. Companies are sorted in six categories identified by Roman numerals I through VI. They are defined as follows:

I. Integrated Marketers—Produce, refine, transport, and market in interstate commerce. Recognized in the petroleum industry as major companies in all of the states or regions in which they market with their own brand or brands.

II. Other Integrated Marketers—Transport and/or market in interstate commerce. Produce and refine also, but one or the other of these functions may be a less substantial part of the overall operation. Market in more than one state with their own brand or brands or supply private brands.

III. Suppliers—Transport and/or market in interstate commerce. May market directly and/or indirectly. May produce and/or refine, but neither function is a substantial part of the overall operation. Distributive functions are supported by exchanges or buying leverage.

IV. Marketers—Operate as autonomous entities, are not affiliated with supplying companies, and do not use suppliers' brands, bulk plants, or other facilities. May make accommodation sales to fellow Category IV marketers, but do not normally function as suppliers.

V. Cooperatives—Generally serve nonretail ranchers and farmers, although some engage in branded sales with pumps open to the public. May or may not be integrated.

VI. Miscellaneous and Unidentified—Unbranded, nonmarketing operations reporting net-taxable gallonages. Also sales unidentified as to category or brand.

National and state reports are based on all known source data for all petroleum marketers in the respective states. The national is an aggregate of the states.

Data are as of April 29, 1983. Information received later than that could change subsequent reports but not by much.

Lundberg Survey reports that data are obtained in a variety of ways, principally from state tax-collecting agencies, but also by direct inquiry.

Lundberg Survey sells state and regional market-share reports by the month on a subscription basis. The company's principal business is retail gasoline surveys, which the firm produces on representative cities across the nation.

National and Regional Market Shares

Share of the U.S. Market, 1982 Versus 1981

	Taxable Motor Gasoline Sales (Add 000)				% of National Market		
			Change				
	1982	1981	Gal.	%	1982	1981	Change in Points
I Integrated							
Amoco	7,404,869	7,455,161	−50,292	−0.67%	7.36%	7.28%	0.08%
Shell	6,824,168	7,038,980	−214,812	−3.05	6.78	6.89	−0.11
Exxon	6,680,471	6,962,816	−282,345	−4.06	6.64	6.81	−0.17
Gulf	5,889,698	5,827,567	62,131	1.07	5.85	5.69	0.16
Mobil	5,661,639	5,510,692	150,947	2.74	5.63	5.38	0.25
Texaco	5,646,559	5,932,319	−285,760	−4.82	5.61	5.77	−0.16
Arco	4,817,692	3,883,199	934,493	24.07	4.79	3.80	−0.99
Chevron	4,773,764	5,327,403	553,639	−10.39	4.74	5.21	−0.47
Union	3,273,914	3,385,768	−111,854	−3.30	3.25	3.31	−0.06
Phillips	2,763,761	2,949,301	−185,540	−6.29	2.75	2.88	−0.13
Sun	2,585,236	2,608,901	−23,665	−0.91	2.57	2.55	0.02
Total (Top 11)	**56,321,771**	**56,882,107**	**560,336**	**−0.98**	**55.96**	**55.59**	**0.37**
Others in Class I	8,823,307	9,322,470	499,163	−5.35	8.77	9.11	−0.34
Total	**65,145,078**	**66,204,577**	**1,059,499**	**−1.60**	**64.73**	**64.70**	**0.03**
II Other Integrated	—	—	—	—	—	—	—
III Suppliers	—	—	—	—	—	—	—
IV Marketers	—	—	—	—	—	—	—
V Cooperatives	—	—	—	—	—	—	—
VI Miscellaneous	—	—	—	—	—	—	—
Total (II-VI)	**35,497,442**	**36,112,480**	**−615,038**	**−1.70**	**35.27**	**35.30**	**−0.03**
Grand Total U.S.	**100,642,520**	**102,317,057**	**−1,674,537**	**−1.64**	**100.00**	**100.00**	**—**

By PAD Districts

	1982	1981	Gal.	%	1982	1981	Change in Points
PAD 1							
Class I (Integrated)	25,243,618	24,916,584	327,034	1.31%	25.08%	24.35%	0.73%
All other	10,315,066	10,729,714	−414,648	−3.86	10.25	10.49	−0.24
Total	**35,555,684**	**35,646,298**	**90,614**	**−0.25**	**35.33**	**34.84**	**0.49**
PAD 2							
Class I (Integrated)	17,691,765	18,380,037	−688,272	−5.30	17.58	17.96	−0.38
All other	13,144,631	13,749,335	−604,704	−3.23	13.06	13.44	−0.38
Total	**30,836,396**	**32,129,372**	**−1,292,976**	**−4.40**	**30.64**	**31.40**	**−0.76**
PAD 3							
Class I (Integrated)	8,463,960	8,928,044	−464,084	−5.20	8.41	8.72	−0.31
All other	6,460,374	6,020,623	439,751	7.30	6.42	5.88	0.54
Total	**14,924,334**	**14,948,667**	**−24,333**	**−0.16**	**14.83**	**14.60**	**0.23**
PAD 4							
Class I (Integrated)	1,420,595	1,518,444	−97,849	−6.44	1.41	1.48	−0.7
All other	1,894,567	1,886,545	8,022	0.43	1.88	1.84	0.4
Total	**3,315,169**	**3,404,989**	**−89,820**	**−2.64**	**3.29**	**3.32**	**−0.3**
PAD 5							
Class I (Integrated)	12,319,815	12,466,163	−146,348	−1.17	12.24	12.18	0.06
All other	3,688,622	3,721,563	−32,941	−0.88	3.67	3.64	0.03
Total	**16,008,437**	**16,187,726**	**−179,289**	**−1.11**	**15.91**	**15.82**	**0.09**

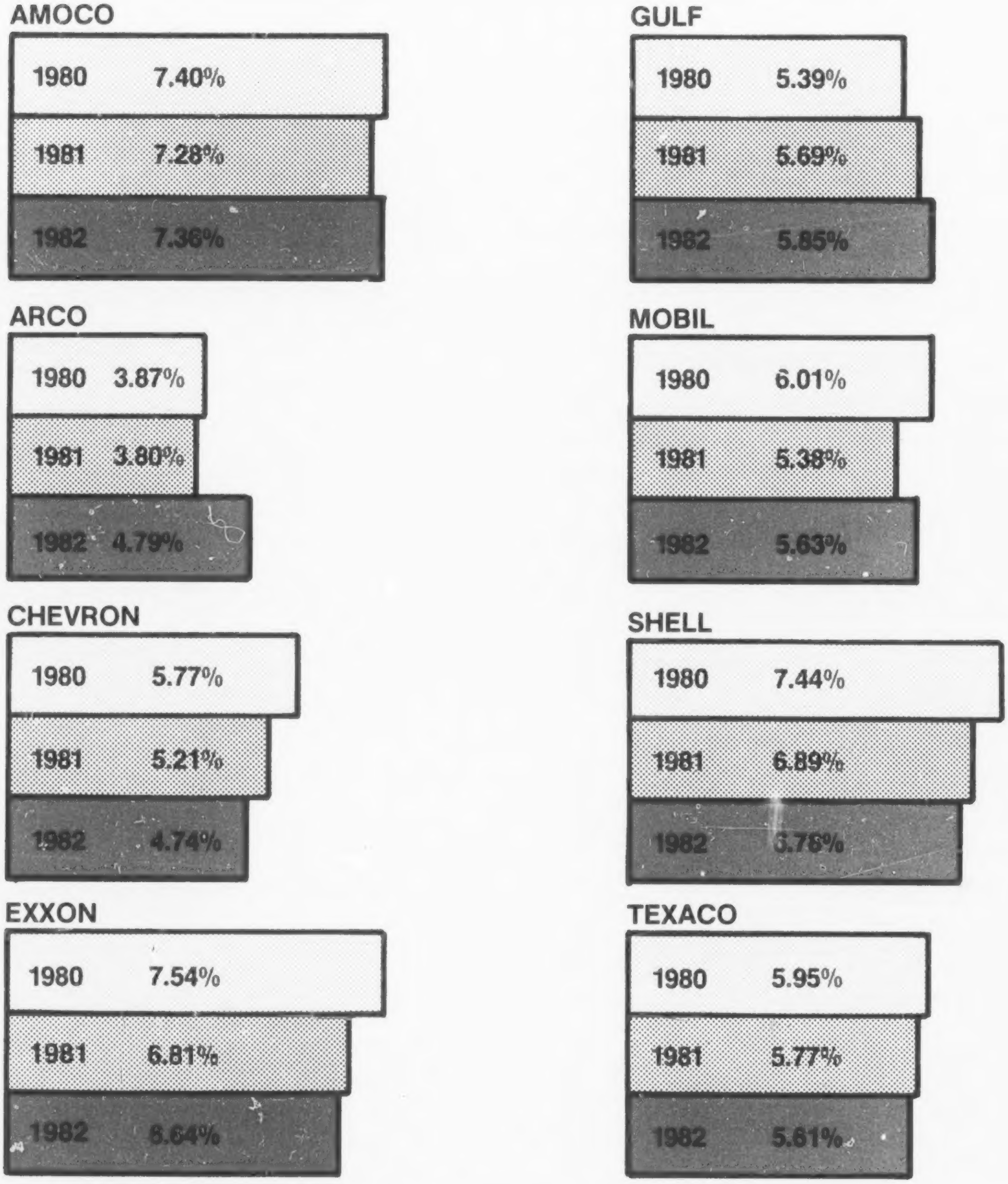
Source: The Lundberg Survey, May, 1983.

Top 11 Marketers: A Seven-Year Overview

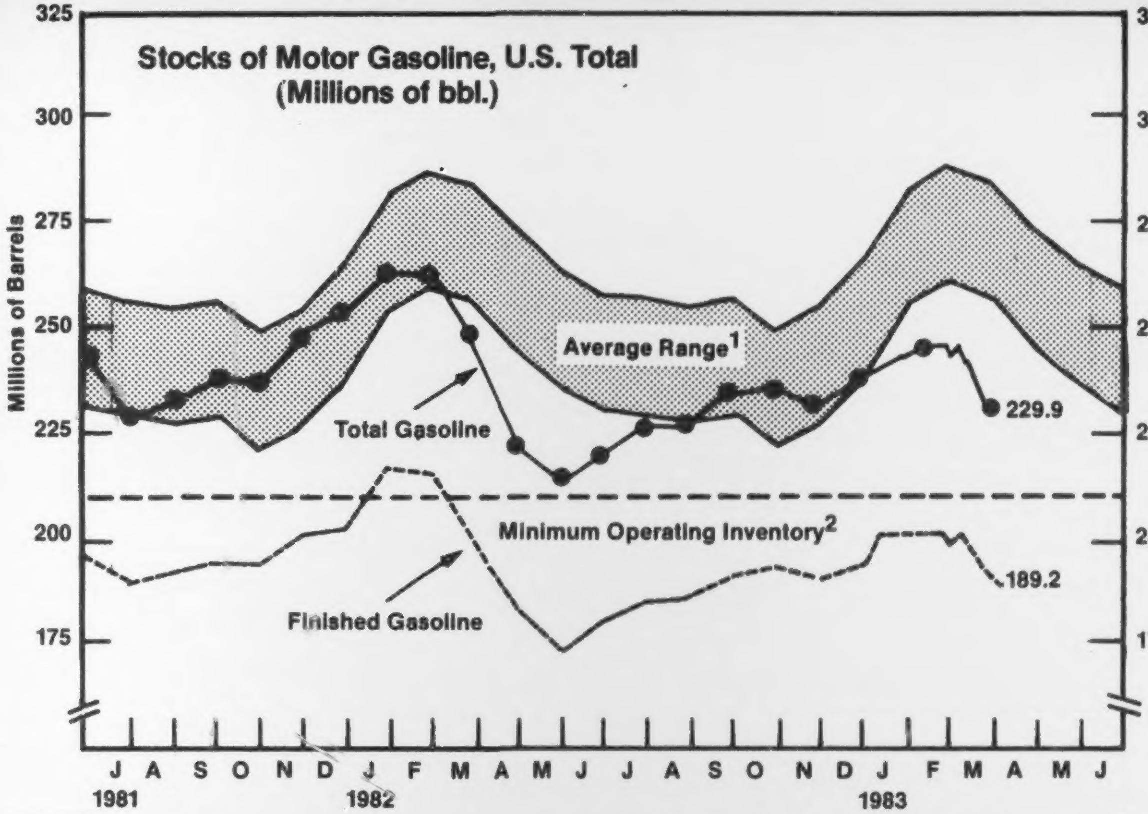
	1982		1981		1980		1979		1978		1977		1976	
	Rank	% Share	Rank	% Share	Rank	% Share	Rank	% Share	Rank	% Share	Rank	% Share	Rank	% Share
Amoco	1	7.36	1	7.28	3	7.40	2	7.48	2	7.71	2	7.30	4	7.20
Shell	2	6.78	2	6.89	2	7.44	3	7.30	1	7.70	1	7.53	3	7.36
Exxon	3	6.64	3	6.81	1	7.54	1	7.65	3	7.28	3	7.14	2	7.40
Gulf	4	5.85	5	5.69	7	5.39	4	6.36	5	5.83	5	5.91	5	6.11
Mobil	5	5.63	6	5.38	4	6.01	6	5.78	6	5.55	6	5.59	6	5.78
Texaco	6	5.61	4	5.77	5	5.95	5	6.01	4	6.75	4	7.11	1	7.50
Atlantic Richfield	7	4.79	8	3.80	8	3.87	8	3.89	8	3.79	8	3.85	8	4.00
Chevron	8	4.74	7	5.21	6	5.77	7	5.30	7	4.76	7	4.75	7	4.70
Union	9	3.25	9	3.31	9	3.50	9	3.49	9	3.28	11	3.08	11	3.24
Phillips	10	2.75	10	2.88	10	2.83	11	2.85	11	3.02	10	3.15	10	3.43
Sun	11	2.57	11	2.55	11	2.74	10	3.01	10	3.20	9	3.39	9	3.49

Source: Lundberg Survey, Inc., May, 1983 and prior reports.

The Top Eight: The Last Three Years

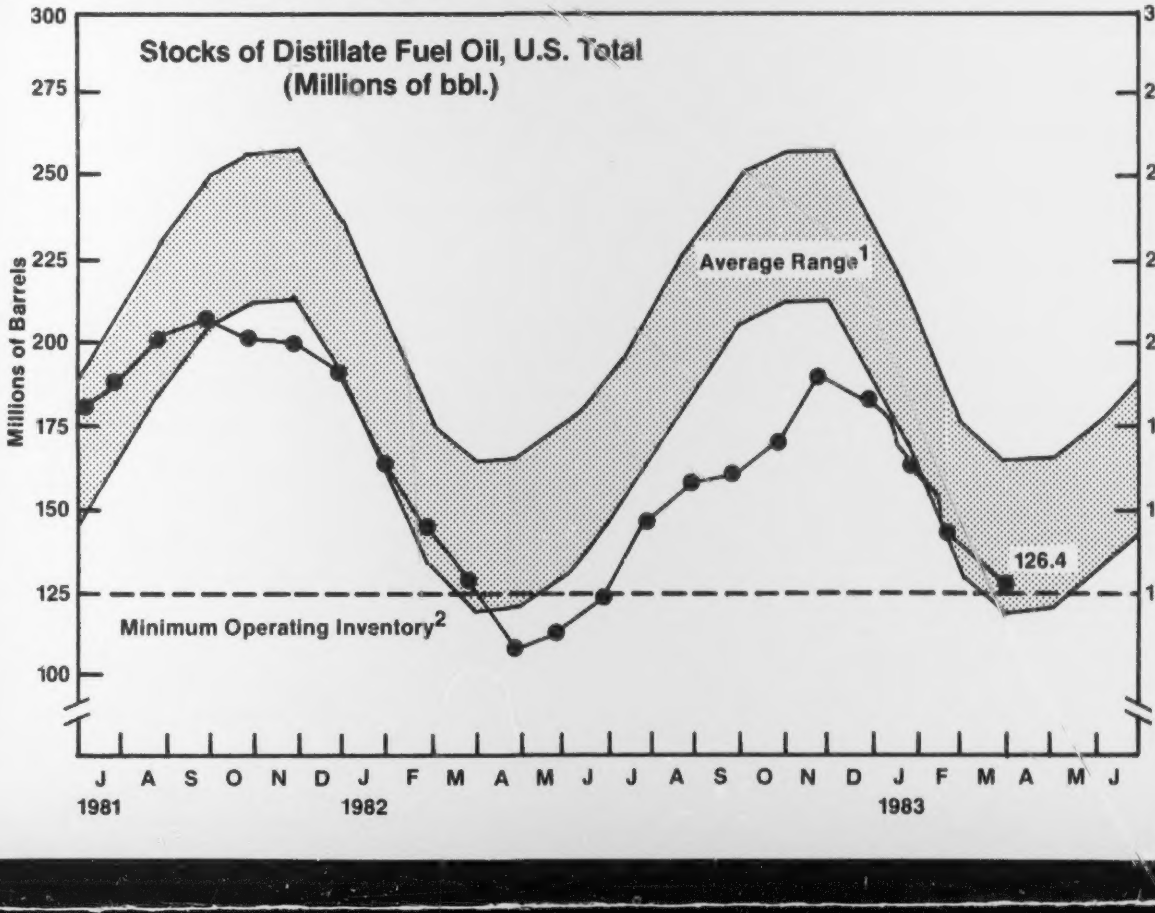


Source: Lundberg Survey, April, 1983.

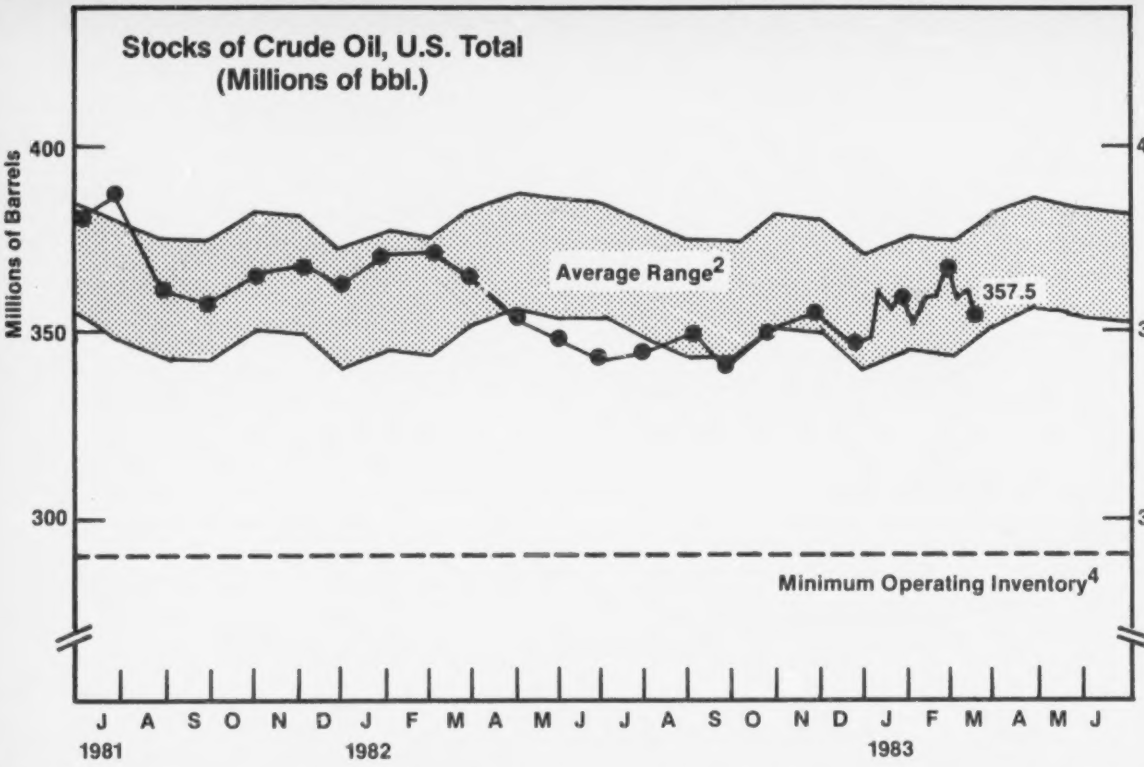


Stocks of Motor Gasoline, U.S. Total (Millions of bbl.)

Product stocks at the Primary Level include those held at refineries, in pipelines, and at major bulk terminals. They do not include stocks held in secondary distribution facilities such as jobber tanks, consumer tanks, and/or barges designed for consumer markets. (1) The average level and width of average range are based on three years of monthly data for the period of January 1977, through December 1979. The seasonal pattern is based on seven years of monthly data for the period of January 1973 through December 1979. (2) National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By its definition, runouts and shortages could occur if inventory levels fall below that level for any extended period of time. See NPC's full report, issued in December 1979 for complete details on primary and secondary storage.
Source: Department of Energy, Weekly Statistical Reports, April, 1983.



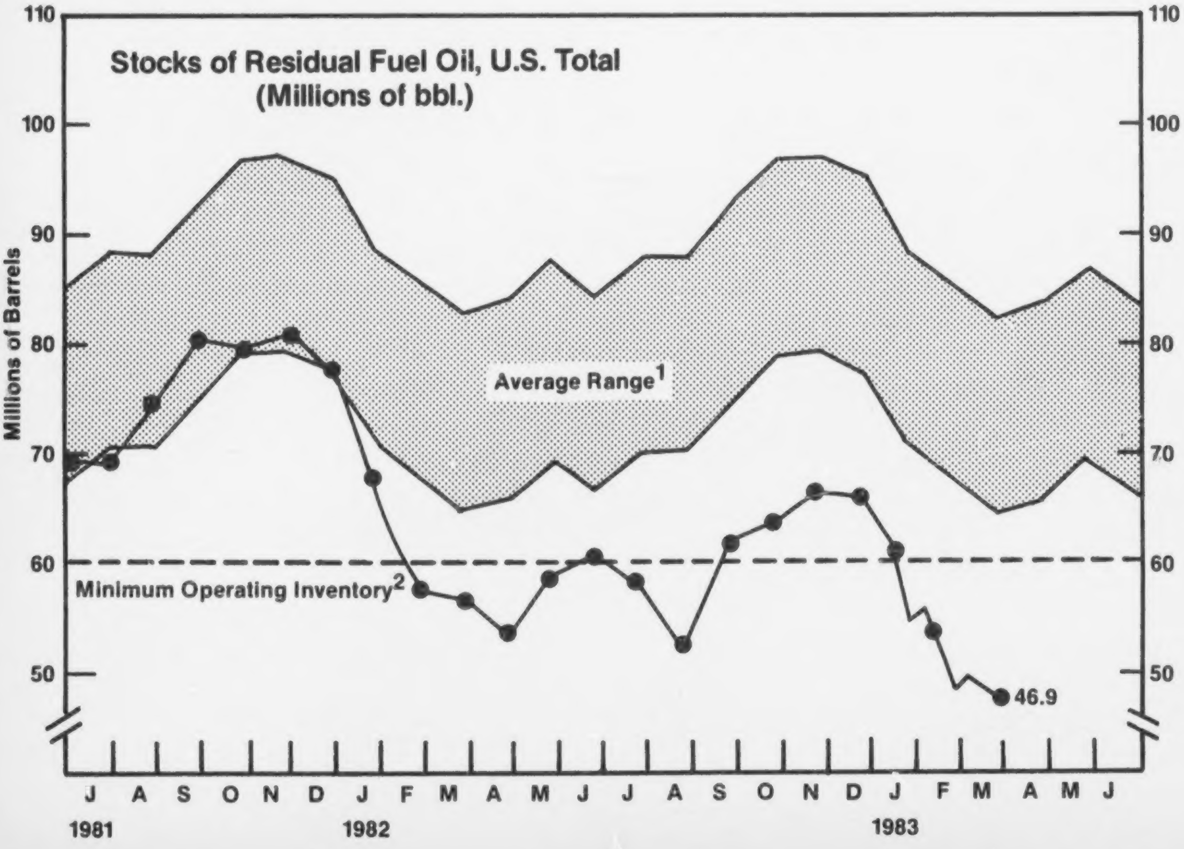
Stocks of Distillate Fuel Oil, U.S. Total (Millions of bbl.)



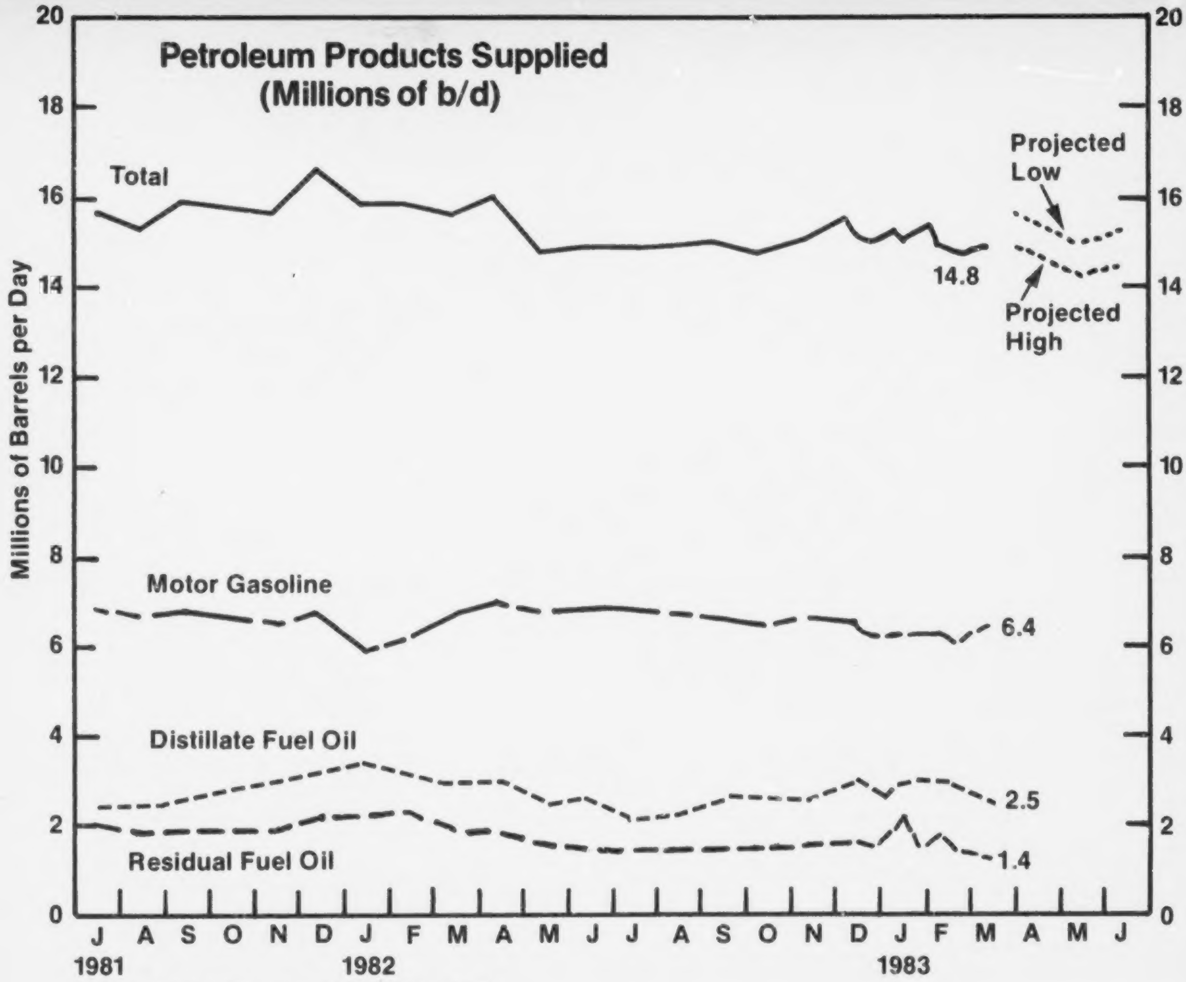
Stocks of Crude Oil, U.S. Total (Millions of bbl.)

Crude Stocks at Primary Levels include those held at refineries, in pipelines, and in lease tanks, but do not include those held in the Strategic Petroleum Reserve operated by the U.S. Government. (1) The average level and width of average range are based on three years of monthly data for the period of January 1977, through December 1979. The seasonal pattern is based on seven years of monthly data for the period of January 1973 through December 1979. (2) National Petroleum Council defines the Minimum Operating Inventory as the minimum level required for routine operation. By its definition, runouts and shortages could occur if inventory levels fall below that level for any extended period of time. See NPN's full report, issued in December 1979 for complete details on primary and secondary storage.

Source: Department of Energy, Weekly Statistical Report, April, 1983.



Stocks of Residual Fuel Oil, U.S. Total (Millions of bbl.)

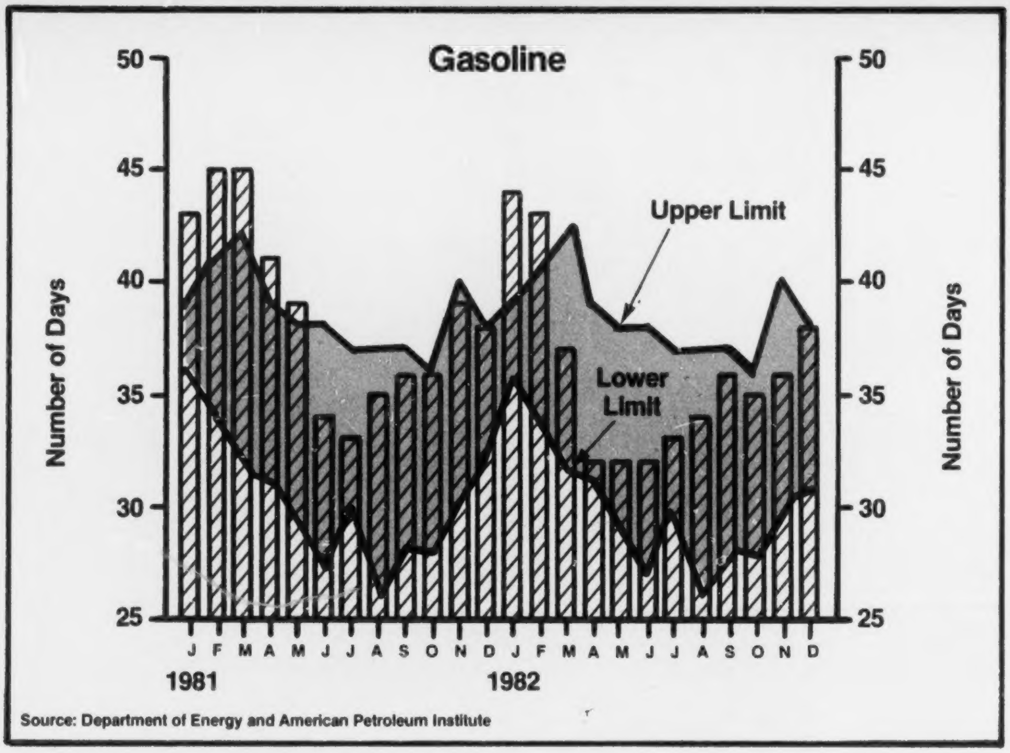


Source: Department of Energy, Weekly Petroleum Status Report

The Role of Imports in Domestic Demand

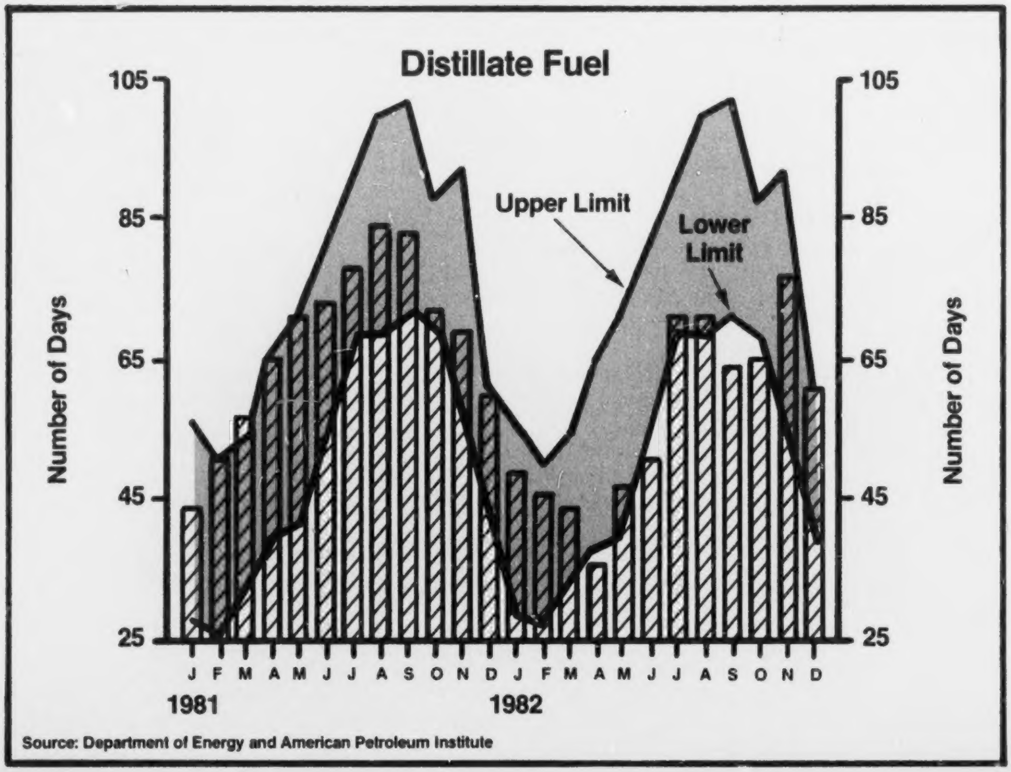
	U.S. Imports			Domestic Demand for Refined Products			
Year	Total (a) (Add 000)	b/d Avg.	% Change	Total (Add 000)	b/d Avg.	% Change	Imports as % of U.S. Demand
1982(b)	1,780,105	4,877	-15.0%	5,567,345	15,253	-5.0%	32.0%
1981	2,095,122	5,740	-16.4	5,861,058	16,058	-5.9	35.7
1980	2,512,636	6,865	-18.2	6,242,445	17,056	-7.9	40.3
1979	3,062,053	8,389	+2.3	6,757,077	18,513	-1.8	45.3
1978	2,993,847	8,202	-6.7	6,879,017	18,847	+2.3	43.5
1977	3,207,106	8,787	+20.2	6,727,468	18,431	+5.6	47.7
1976	2,676,411	7,313	+20.8	6,390,750	17,461	+7.2	41.9
1975	2,210,335	6,056	-0.9	5,957,515	16,322	-2.0	37.1
1974	2,230,947	6,112	-2.3	6,078,239	16,653	-3.8	36.7
1973	2,283,493	6,256	+32.0	6,317,303	17,308	+5.7	36.1
1972	1,735,314	4,741	+20.8	5,990,316	16,367	+7.6	29.0
1971	1,432,880	3,926	+14.8	5,552,560	15,212	+3.5	25.8
1970	1,248,062	3,419	+8.0	5,364,473	14,697	+4.0	23.3
1965	900,772	2,468	+9.3	4,202,039	11,512	+4.4	21.4
1960	664,111	1,815	+2.0	3,585,820	9,797	+2.8	18.5
1955	455,564	1,248	+18.6	3,089,348	8,464	+9.0	14.7
1950	310,261	850	+31.8	2,392,974	6,556	+13.0	13.0

(a) Crude oil and products but not crude for Strategic Petroleum Reserve; (b) Preliminary.
Source: American Petroleum Institute, Basic Petroleum Data Book, Department of Energy.



Source: Department of Energy and American Petroleum Institute

Days' Supply of Gasoline and Fuel Oil in Inventory—1982



Source: Department of Energy and American Petroleum Institute

Petroleum Production and New Reserves Found

All Time to Dec. 31, 1980

	Total Liquid Petroleum			Natural Gas		
	(Mil. Bbl.)			(Bil. Cu. Ft.)		
	Found	Produced	Proved Reserves Dec. 31, 1980	Found	Produced	Proved Reserves Dec. 31, 1980
PAD District 1						
Florida	662	501	161	479	357	122
Maryland	0	0	0	†	†	†
New York	†	†	†	794	586	208
Pennsylvania	1,349	1,314	35	10,339	9,388	951
Virginia	†	†	†	†	†	†
West Virginia	892	765	127	17,896	15,337	2,559
Total	**2,903**	**2,580**	**323**	**29,508**	**25,668**	**3,840**
PAD District 2						
Illinois	3,369	3,256	113	†	†	†
Indiana	1,277	1,254	23	†	†	†
Kansas	6,289	5,590	699	36,552	26,487	10,065
Kentucky	823	763	60	4,019	3,483	536
Michigan	1,212	895	317	1,862	311	1,551
Missouri	†	†	†	†	†	†
Nebraska	442	396	46	†	†	†
North Dakota	929	654	275	1,498	904	594
Ohio	988	872	116	7,439	5,740	1,699
Oklahoma	15,888	14,354	1,534	66,312	52,404	13,908
South Dakota	†	†	†	†	†	†
Tennessee	†	†	†	†	†	†
Total	**31,217**	**28,034**	**3,183**	**117,682**	**89,329**	**28,353**
PAD District 3						
Alabama	559	279	280	995	313	682
Arkansas	1,669	1,576	123	5,407	3,611	1,796
Louisiana	26,646	22,549	4,097	207,120	158,735	48,385
Mississippi	2,247	2,025	222	7,398	5,622	1,776
New Mexico	6,876	5,788	1,088	46,274	32,318	13,956
Texas	65,941	55,283	10,658	284,024	230,854	53,170
Total	**103,968**	**87,500**	**16,468**	**551,218**	**431,453**	**119,765**
PAD District 4						
Colorado	1,786	1,409	377	6,682	3,512	3,170
Montana	1,266	1,071	195	3,114	1,806	1,308
Utah	1,083	758	325	2,722	1,438	1,284
Wyoming	6,209	4,940	1,269	18,525	9,112	9,413
Total	**10,344**	**8,178**	**2,166**	**31,043**	**15,868**	**15,175**
PAD District 5						
Alaska	11,236	2,474	8,762	35,526	2,131	33,395
Arizona	†	†	†	†	†	†
California	25,525	19,935	5,590	34,394	28,843	5,551
Nevada	†	†	†	†	†	†
Oregon	0	0	0	†	†	†
Total	**36,761**	**22,409**	**14,352**	**69,920**	**30,974**	**38,946**
All Other States	301	260	41	2,332	2,152	180
Total U.S.	**186,494**	**148,961**	**36,533**	**801,703**	**595,444**	**206,259**

†Included in All Other States.

Source: Independent Petroleum Assn. of America, "Oil Industry in Your State, 1982."

United States Crude Oil Production—1972-1981

(Thousands of Barrels Daily)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
PAD District 1										
Florida	46.2	89.6	99.6	114.7	121.5	127.8	130.2	129.2	117.2	95.3
New York	2.8	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.3
Pennsylvania	9.4	9.0	9.5	9.0	8.3	7.4	7.9	7.9	7.2	10.2
Virginia	**	**	**	**	**	**	**	**	**	.04
West Virginia	7.3	6.5	7.3	6.8	6.9	6.9	6.5	6.6	6.4	9.5
Total	**65.7**	**107.7**	**118.9**	**132.9**	**139.0**	**144.4**	**146.9**	**146.0**	**133.1**	**117.3**
PAD District 2										
Illinois	95.3	84.0	75.5	71.4	71.8	70.2	64.0	59.7	62.0	70.4
Indiana	16.7	14.6	13.5	12.7	12.7	14.6	12.8	12.9	13.6	12.9
Kansas	201.5	181.5	169.0	161.9	160.4	157.5	155.0	156.2	164.3	180.3
Kentucky	26.5	23.8	21.5	20.7	20.4	18.0	15.7	15.1	16.2	17.9
Michigan	35.5	40.0	49.4	66.9	83.1	90.3	95.0	95.5	97.8	89.5
Nebraska	23.8	19.8	18.1	16.8	16.9	16.4	16.1	16.6	17.0	18.3
North Dakota	56.3	55.4	54.0	56.0	59.4	63.8	68.0	84.7	110.2	125.2
Ohio	25.6	24.1	24.9	26.2	27.3	28.4	30.6	32.8	35.3	37.1
Oklahoma	567.3	523.8	487.1	446.9	441.0	428.4	412.2	393.6	410.2	422.1
South Dakota	0.6	0.8	1.3	1.3	1.2	1.7	2.4	2.3	2.1	2.7
Other (a)	0.7	0.8	2.2	2.0	1.8	2.2	1.8	1.9	2.4	3.1
Total	**1,049.8**	**968.6**	**916.5**	**882.8**	**896.0**	**891.7**	**873.6**	**871.3**	**931.1**	**979.6**
PAD District 3										
Alabama	27.2	32.0	36.5	36.9	40.2	50.0	54.3	52.5	60.5	56.7
Arkansas	50.6	49.4	45.3	44.2	49.4	55.3	55.7	51.7	49.8	51.6
Louisiana	2,436.7	2,278.1	2,020.0	1,783.1	1,657.1	1,542.2	1,459.6	1,341.6	1,281.8	1,236.2
Gulf	2,315.7	2,169.2	1,913.7	1,680.8	1,552.7	1,441.1	1,363.1	1,254.1	1,193.2	1,140.0
Other	121.0	108.9	106.3	102.3	104.4	101.1	96.5	87.5	88.6	95.8
Mississippi	166.9	153.7	139.1	127.7	125.9	117.9	115.1	102.3	98.2	94.2
New Mexico	302.0	276.7	270.4	260.5	251.7	239.0	228.4	218.2	205.1	197.7
Texas	3,556.5	3,547.0	3,457.9	3,347.8	3,250.0	3,117.5	2,942.6	2,789.3	2,670.6	2,607.3
Total	**6,539.9**	**6,336.9**	**5,969.2**	**5,600.2**	**5,374.4**	**5,121.9**	**4,855.7**	**4,555.6**	**4,366.0**	**4,243.7**
PAD District 4										
Colorado	87.5	100.2	102.8	104.4	106.5	108.1	100.8	88.5	81.4	83.0
Montana	92.6	94.8	94.7	90.0	89.7	89.5	83.5	82.1	80.0	84.4
Utah	72.6	89.5	107.8	115.9	93.7	90.7	85.9	76.0	68.2	65.0
Wyoming	382.5	388.8	383.5	372.5	366.5	373.9	376.4	361.3	345.2	334.7
Total	**635.2**	**673.3**	**688.8**	**682.8**	**656.4**	**662.2**	**646.6**	**607.9**	**574.8**	**567.1**
PAD District 5										
Alaska	199.2	198.1	193.4	191.3	173.2	463.6	1,229.1	1,400.9	1,616.6	1,609.1
Arizona	2.7	2.2	2.0	1.7	1.4	1.2	1.1	1.3	1.1	.98
California	948.2	920.8	885.0	882.7	890.8	957.8	951.2	965.1	975.2	1,054.7
Nevada	0.2	0.3	0.4	0.3	0.4	1.8	3.2	3.4	2.4	1.92
Total	**1,150.3**	**1,121.4**	**1,080.8**	**1,076.0**	**1,065.8**	**1,424.4**	**2,184.6**	**2,370.7**	**2,595.3**	**2,666.7**
Total U.S.	**9,440.9**	**9,207.9**	**8,774.2**	**8,374.7**	**8,131.6**	**8,244.6**	**8,707.4**	**8,551.5**	**8,600.3**	**8,574.4**

**Less than 100 barrels daily; (a) Missouri and Tennessee.

Source: Independent Petroleum Assn. of America, "The Oil Industry in Your State, 1982."

Stocks of Motor Gasoline by PAD Regions

(Add 000,000 bbl.)

1982	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Fin. Gasoline	214.1	213.3	198.8	179.1	173.7	177.8	182.9	184.8	191.3	192.1	189.3	194.4
Blend Comp.	47.9	48.8	49.1	43.3	41.2	41.9	43.1	41.1	42.5	42.3	40.7	40.9
Total Gasoline	262.1	262.1	247.9	222.8	214.9	219.7	226.8	226.0	233.8	234.3	230.0	235.3
East Coast	71.7	69.6	67.1	61.7	63.6	66.0	63.1	62.4	63.5	63.5	66.1	67.5
Midwest	78.6	79.1	74.8	63.2	56.8	56.6	62.6	65.8	69.5	67.0	64.0	65.2
Gulf Coast	70.2	69.2	68.0	63.4	63.6	65.0	66.1	64.4	67.4	69.8	65.5	66.2
Rocky Mountain	9.6	9.9	10.1	8.9	7.7	6.5	5.8	5.5	5.7	6.4	7.1	8.5
West Coast	32.0	34.3	27.8	25.5	23.3	25.7	28.4	27.7	27.7	27.6	27.2	27.9

Stocks of Distillate Fuel Oil by PAD Regions

(Add 000,000 bbl.)

1982	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total U.S.	166.0	146.7	127.7	108.8	114.5	124.5	148.1	158.9	161.2	170.2	185.6	178.6
East Coast	69.2	58.4	44.9	35.1	39.2	44.2	57.4	63.9	68.0	75.7	88.7	80.6
Midwest	47.4	43.8	40.2	31.2	31.2	34.1	42.6	45.5	45.5	44.3	45.3	47.0
Gulf Coast	30.8	26.7	27.5	28.2	31.0	32.5	34.2	35.8	34.1	37.0	36.9	34.2
Rocky Mountain	4.1	3.9	3.7	3.1	2.8	3.0	3.4	3.8	3.5	3.5	3.5	4.0
West Coast	14.5	13.9	11.4	11.1	10.3	10.7	10.6	10.2	10.1	9.6	11.3	12.7

Stocks of Residual Fuel Oil by PAD Regions

(Add 000,000 bbl.)

1982	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total U.S.	68.2	58.1	57.3	53.6	59.1	60.5	59.0	52.8	61.8	63.6	66.4	66.2
East Coast	32.2	24.9	24.8	23.5	28.3	28.2	27.1	23.1	29.0	32.8	36.4	34.7
Midwest	7.7	7.3	7.0	6.2	6.0	5.7	5.7	5.3	5.8	5.1	5.0	5.2
Gulf Coast	17.4	14.4	14.7	13.5	14.9	17.1	16.4	15.6	16.2	15.6	16.1	16.3
Rocky Mountain	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.6
West Coast	10.2	11.0	10.3	9.9	9.4	9.2	9.3	8.4	10.4	9.6	8.4	9.3

Petroleum Products Supplied

(Add 000,000 b/d)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1981												
Motor Gasoline	6.4	6.3	6.3	6.6	6.6	7.0	6.8	6.6	6.7	6.6	6.4	6.7
Jet Fuel	1.1	1.0	1.1	1.0	0.9	1.0	1.1	1.0	1.0	0.9	1.0	1.0
Distillate Fuel Oil	4.1	3.4	2.9	2.5	2.4	2.4	2.4	2.4	2.5	2.8	2.9	3.2
Residual Fuel Oil	2.9	2.5	2.1	1.9	1.8	2.0	2.0	1.8	1.9	1.9	1.9	2.3
Other	3.9	3.8	3.5	3.4	3.7	3.7	3.4	3.5	3.8	3.6	3.4	3.4
Total	18.4	17.0	15.9	15.4	15.4	16.1	15.7	15.3	15.9	15.8	15.6	16.6
1982												
Motor Gasoline	5.9	6.1	6.6	6.9	6.7	6.8	6.8	6.7	6.5	6.4	6.6	6.5
Jet Fuel	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1
Distillate Fuel Oil	3.4	3.2	2.9	3.0	2.4	2.5	2.1	2.2	2.5	2.6	2.5	2.9
Residual Fuel Oil	2.2	2.3	1.9	1.9	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6
Other	3.4	3.2	3.2	3.2	3.1	3.1	3.4	3.4	3.4	3.4	3.4	3.5
Total	15.9	15.9	15.6	16.0	14.8	14.9	14.8	14.8	14.9	14.8	15.0	15.5

Source: Department of Energy, Weekly Petroleum Status Report.

U.S. Estimated Petroleum Balance—1982 (Add 000 b/d)

Supply/Products Supplied From Primary Storage (a)	Full Year			4th Quarter			3rd Quarter			2nd Quarter		
	1982	1981	% Chng.	1982	1981	% Chng.	1982	1981	% Chng.	1982	1981	% Chng.
Products Supplied:												
Motor gasoline	6,505	6,588	(1.3)	6,369	6,546	(2.7)	6,643	6,708	(1.0)	6,851	6,730	1.8
Unleaded motor gasoline (b)	3,515	3,403	3.3	3,508	3,428	2.3	3,609	3,505	3.0	3,550	3,422	3.7
Naphtha-jet	204	198	3.0	189	181	4.4	217	217	—	203	201	1.0
Kerosine-jet	800	809	(1.1)	810	782	3.6	805	826	(2.5)	773	773	—
Kerosine	124	127	(2.4)	138	161	(14.3)	100	93	7.5	93	88	5.7
Distillate fuel oil	2,679	2,829	(5.3)	2,651	2,966	(10.6)	2,273	2,425	(6.3)	2,641	2,457	7.5
Residual fuel oil	1,661	2,088	(20.5)	1,424	2,015	(29.3)	1,529	1,902	(19.6)	1,622	1,863	(12.9)
All other oils	3,525	3,693	(4.5)	3,506	3,646	(3.8)	3,555	3,611	(1.6)	3,422	3,631	(5.8)
Reclassified (c)	-323	-269	20.1	-289	-285	1.4	-323	-245	31.8	-289	-251	15.1
Total domestic products supplied	15,175	16,063	(5.5)	14,798	16,012	(7.6)	14,799	15,537	(4.8)	15,316	15,492	(1.1)
Exports	812	595	36.5	848	698	21.5	774	579	33.7	815	529	54.1
Total products supplied	**15,987**	**16,658**	**(4.0)**	**15,646**	**16,710**	**(6.4)**	**15,573**	**16,116**	**(3.4)**	**16,131**	**16,021**	**0.7**
Supply:												
Domestic production:												
Crude oil (d)	8,654	8,572	1.0	8,645	8,577	0.8	8,667	8,562	1.2	8,655	8,551	1.2
Natural gas liquids	1,543	1,609	(4.1)	1,560	1,606	(2.9)	1,525	1,591	(4.1)	1,565	1,561	0.3
Other supply[7]	640	580	14.3	632	720	(12.2)	723	321	125.2	586	500	17.2
Total domestic supply	10,837	10,741	0.9	10,837	10,903	(0.6)	10,915	10,474	4.2	10,806	10,612	1.8
Imports:												
Crude oil, total (e)	3,308	4,141	(20.1)	3,356	3,892	(13.8)	3,685	4,169	(11.6)	3,141	3,934	(20.2)
Canadian	202	164	23.2	192	185	3.8	215	150	43.3	184	131	40.5
Other	3,106	3,977	(21.9)	3,164	3,707	(14.6)	3,470	4,019	(13.7)	2,957	3,803	(22.2)
Products, total	1,537	1,599	(3.9)	1,513	1,660	(8.9)	1,403	1,577	(11.0)	1,373	1,362	0.8
Residual fuel oil	737	800	(7.9)	699	860	(18.7)	660	830	(20.5)	680	621	9.5
Other	800	799	0.1	814	800	1.8	743	747	(0.5)	693	741	(6.5)
Total imports	4,845	5,740	(15.6)	4,869	5,552	(12.3)	5,088	5,746	(11.5)	4,514	5,296	(14.8)
Total supply	**15,682**	**16,481**	**(4.8)**	**15,706**	**16,455**	**(4.6)**	**16,003**	**16,220**	**(1.3)**	**15,320**	**15,908**	**(3.7)**

(a) Preliminary; (b) Included in motor gasoline total; (c) In 1981, Department of Energy began using a new data collection system dealing with reclassified products. These are deducted from domestic supplies to eliminate double counting; (d) Includes lease condensate; (e) Does not include oil imported from Strategic Petroleum Reserve nor crude stocks held in SPR.
Source: American Petroleum Institute, Monthly Statistical Reports.

U.S. Refinery Operations (Add 000 b/d)

Refinery Operations (a)	Full Year			4th Quarter			3rd Quarter			2nd Quarter		
	1982	1981	%Chng.	1982	1981	%Chng.	1982	1981	%Chng.	1982	1981	%Chng.
Input to crude oil distillation units	12,176	12,751	(4.5)	12,038	12,546	(4.0)	12,575	12,837	(2.0)	12,236	12,523	(2.3)
Operable capacity	17,445	18,603	(6.2)	16,835	18,418	(8.6)	17,302	18,659	(7.3)	18,210	18,699	(2.6)
Refinery utilization (%)	69.8%	68.5%	1.9	71.5%	68.1%	5.0	72.7%	68.8%	5.7	67.2%	67.0%	0.3
Crude oil runs	11,766	12,471	(5.7)	11,627	12,215	(4.8)	12,168	12,559	(3.1)	11,868	12,272	(3.3)

(a) Preliminary.
Source: American Petroleum Institute, Monthly Statistical Reports.

Crude and Product Inventories (Add 000,000 bbl.)

Stocks (a)	Full Year			4th Quarter			3rd Quarter			2nd Quarter		
	1982	1981	% Chng.	1982	1981	% Chng.	1982	1981	% Chng.	1982	1981	% Chng.
Crude oil (b)	348.1	363.5	(4.2)	348.1	363.5	(4.2)	350.3	356.0	(1.6)	352.3	392.2	(10.2)
Unfinished oils	102.8	111.3	(7.6)	102.8	111.3	(7.6)	116.8	118.4	(1.4)	116.6	126.1	(7.5)
Motor gasoline	241.4	253.0	(4.6)	241.4	253.0	(4.6)	237.0	237.1	—	218.6	241.7	(9.6)
Naphtha-jet	6.0	7.1	(15.5)	6.0	7.1	(15.5)	6.2	6.1	1.6	5.7	6.0	(5.0)
Kerosine-jet	32.2	34.0	(5.3)	32.2	34.0	(5.3)	33.4	37.0	(9.7)	34.3	39.3	(12.7)
Kerosine	10.7	11.0	(2.7)	10.7	11.0	(2.7)	10.9	13.9	(21.6)	10.8	13.2	(18.2)
Distillate fuel oil	179.6	191.5	(6.2)	179.6	191.5	(6.2)	163.2	207.3	(21.3)	126.4	180.2	(29.9)
Residual fuel oil	67.3	78.0	(13.7)	67.3	78.0	(13.7)	59.0	80.2	(26.4)	58.3	70.1	(16.8)
All other oils	154.1	203.9	(24.4)	154.1	203.9	(24.4)	156.0	220.8	(29.3)	155.0	205.6	(24.6)
Total all oils	**1,142.2**	**1,253.3**	**(8.9)**	**1,142.2**	**1,253.3**	**(8.9)**	**1,132.8**	**1,276.8**	**(11.3)**	**1,078.0**	**1,274.4**	**(15.4)**

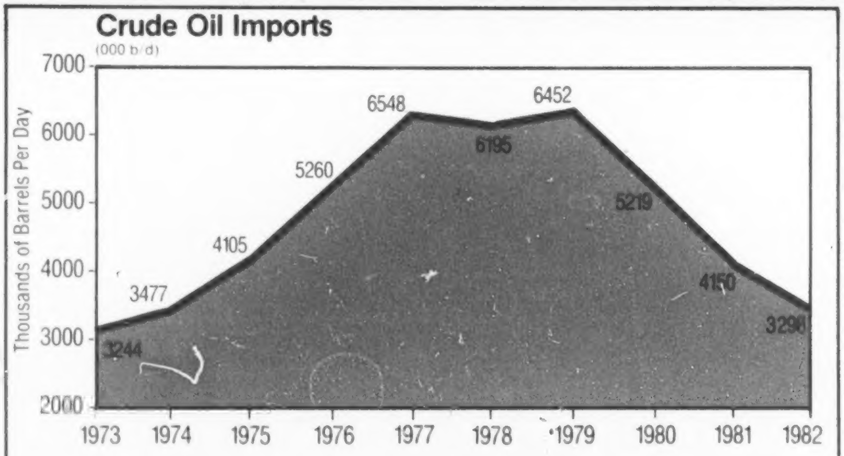
(a) Preliminary; (b) Does not include oil imported for Strategic Petroleum Reserve, nor crude oil stocks held in SPR.
Source: American Petroleum Institute Monthly Statistical Reports.

Domestic Supply Trend (add 000,000 bbl.)

Year	All products	Gasoline	Kerosine (a)	Distillate	Residual	LPG	Lubes	Other
1982 (b)	5,568	2,386	339	977	618	443	51	754
1981	5,861	2,404	342	1,032	762	407	56	858
1980	6,932	2,536	397	1,389	1,033	414	58	1,105
1979	6,758	2,568	388	1,210	1,032	456	66	1,038
1978	6,879	2,705	377	1,253	1,103	358	63	1,020
1977	6,710	2,633	350	1,223	1,121	369	58	956
1976	6,391	2,567	351	1,147	1,025	381	56	864
1975	5,958	2,436	347	1,041	899	362	50	823
1973	6,317	2,453	386	1,124	1,030	404	59	851
1971	5,552	2,213	385	971	838	369	49	727
1970	5,364	2,131	358	927	804	363	50	731
1965	4,202	1,720	220	776	587	307	47	545
1960	3,610	1,512	132	685	559	227	43	427

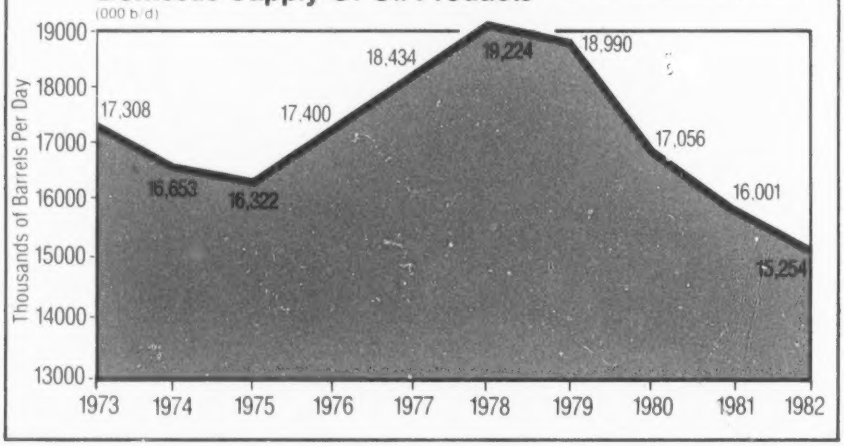
(a) Kerosine includes jet fuel; (b) Preliminary.
Source: Department of Energy, Petroleum Supply Monthly.
Figures for 1963 and thereafter are not strictly comparable to earlier years because of product reclassification resulting from separately reporting data for petrochemical feedstocks.

Crude Oil Imports



Domestic Supply Of Oil Products

Source: Department of Energy



Prices sagged and consumption of oil's two prime products—gasoline and fuel oil—declined further in 1982. It was the 1981 story all over again—much too much crude oil everywhere, and an abundance of products that not only sated but overwhelmed the marketplace.

Price competition for gasoline was fierce, with the retail average for all grades at 124.4¢ on Dec. 31—10¢ less than it was at the same time the year before. Regular grade gasoline dipped below the $1 gal. mark in scattered places, and in the spring of 1983 such prices were common. Some marketers were moving unleaded regular at 99.9¢ too.

The soft markets and bitter street fighting, as evidenced by the credit card war and cash discounts, left no doubt that 1983 would see little or no improvement in the gasoline prices.

No. 2 heating oil eroded during the last quarter of 1982 mostly because warmer weather softened demand. The same held true in the first quarter of 1983, with the heating season still substantially off. Prices firmed a little, but not much.

The OPEC nations set new bench marks for crude oil in the first quarter of 1983, but there were serious reservations whether they would hold—that once again, it was a case of too little too late. If the bottom falls out of the international markets again, the downward pressure on the gasoline and fuel oil markets throughout 1983 cannot help but be the worst yet.

Supply and Production, Principal Products

(Add 000 bbl.)

	Motor Gasoline	Aviation Gasoline	Distillate Fuel Oil	Residual Fuel Oil	Jet Fuel (a)	Lubricants	Asphalt
Domestic Supply							
1982 (b)	2,386,286	9,322	976,822	618,351	369,283	50,882	124,545
1981	2,404,447	11,147	1,032,476	762,030	367,717	55,958	123,982
Production							
1982 (b)	2,315,626	8,176	953,420	388,614	356,513	51,563	121,556
1981	2,336,182	10,902	953,732	482,088	353,215	60,561	123,452
Imports							
1982 (b)	67,604	0	33,821	28,681	9,629	3,557	1,678
1981	57,182	0	63,071	292,070	13,859	3,069	1,427

(a) Includes naphtha and kerosine-based jet fuel. (b) Preliminary Source: Department of Energy, Petroleum Supply Monthly

U.S. Oil Imports (a)

(Add 000 b/d)

Year	Crude Oil	Other Products	Residual Fuel Oil	Total Imports	% of Total U.S. Supply
1982 (b)	3,320	810	745	4,875	32.3%
1981	4,141	779	800	5,720	33.9
1980	5,219	690	920	6,829	40.1

(a) Does not include Strategic Petroleum Reserve; (b) Preliminary
Source: Department of Energy, Monthly Energy Review and IPAA.

Origins of U.S. Oil Imports

(Add 000 b/d)

	Western Hemisphere			Eastern Hemisphere		
Year	Canada	Venezuela	Other	Mid-East	Africa	Other
1982	465	385	1,925	790	705	605
1981	410	375	1,375	1,120	1,425	1,020
1980	435	460	1,631	1,565	2,915	781

Source: Independent Petroleum Assn. of America

	Total Well Completions			Proved Reserves			Supply (Add 000 b/d)		
Year	Total (a)	Dry	% Dry	Crude Oil (b)	Crude Production/ Reserve Ratio	Natural Gas (c)	Natural Gas Production/ Reserve Ratio	Domestic Crude & Natl. Gas Lqds.	Crude & Product Imports
1982 (d)	88,258	26,595	30.1%	NA	NA	NA	NA	10,200	4,875
1981	80,537	22,973	28.5	29,426	10.0	201.7	10.4	10,180	5,720
1980	62,462	18,089	28.9	29,805	10.0	199.0	10.6	10,161	6,787

(a) Includes oil, gas, service and dry completions; (b) Millions of bbl.; (c) Trillions of cubic feet; (d) Preliminary Source: Independent Petroleum Assn. of America and Department of Energy

Supply/Demand Forecast for 1983

Last fall, the Independent Petroleum Assn. of America, whose semi-annual forecasts are usually well on target, predicted that things in 1983 wouldn't be much different than they were in 1982.

This is the way IPAA foresaw things:

Total demand, including exports, will be off slightly. Domestic demand will be up a miniscule 0.5%—roughly 77,000 b/d. Industrial fuel and diesel fuel will account for most of that. Gasoline will be down again—for the fourth consecutive year—by 51,000 b/d, or 0.8%.

Supply in 1983 will be up slightly, about 2.1% or 331,000 b/d. Imports will account for most of the increase because domestic production of crude oil and natural gas liquids will be fairly well balanced with less than a 1% change.

Inventories at the end of 1983 are expected to be about the same as they were at the end of 1982.

Crude runs will be about 250,000 b/d in 1983, but with fewer refineries doing the processing the utilization rate may improve somewhat. Crude runs are expected to average 12,247,000 b/d next year.

The IPAA forecast also said:

"Domestic demand is expected to reverse its downward trend of the past four years and average 15.5-million b/d in 1983, a modest increase of approximately 77,000 b/d from an estimated 15.4-million b/d in 1982. Renewed growth in industrial demand for oil products as the economy improves, coupled with gains in oil demand in the transportation sector, are expected to account for most of the forecast growth.

"Motor gasoline consumption is forecast to decline 51,000 b/d in 1983 to average 6.5-million b/d, following a drop of about 30,000 b/d in 1982. Continued growth in miles driven and in the vehicle population is expected to be slightly offset by improvements in fuel efficiency.

"Aviation fuel consumption is projected to increase approximately 1% to average 1.04-million b/d in 1983 following an estimated decline of 0.7% this year. Improvement in the economic climate will lead to increased passenger miles flown, with potential increases being partially mitigated by improved fuel efficiency.

"Middle distillates are expected to show a 2.0% growth to average 2.93-million b/d in 1983, up 56,000 b/d following an estimated 87,000 b/d decline in 1982. This will reverse the drop of nearly 600,000 b/d from the 1978 level of 3.44-million b/d, due to natural gas substitution, conservation, and the recessionary trend of the last two years. Growth in the demand of distillate for transportation and industrial fuel use will offset a slight decline in residential heating oil consumption.

"Residual fuel oil consumption is projected to decline 42,000 b/d to average 1.78-million b/d in 1983. This moderate decline follows a drop of over 265,000 b/d in 1982. Most of this decline will be the result of increased penetration of coal, nuclear and hydroelectric power in the electric utility sector.

"Demand for liquefied petroleum gases is expected to show an increase of 0.7% in 1983, following a 1.3% increase in 1982. Other products are expected to increase 4.1% in 1983 following a 13.4% decline in 1982."

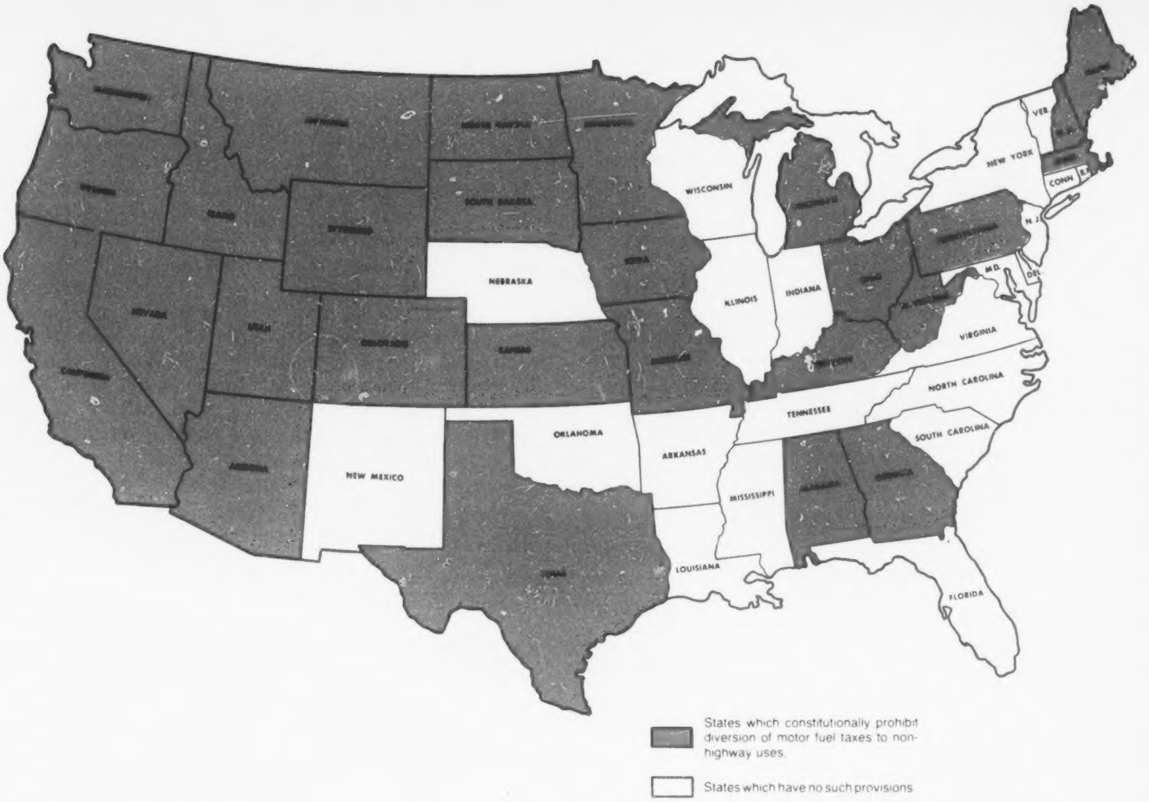
The Outlook: Not Good But Not Bad

(Add 000 b/d except stocks which are millions of bbl.)

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Full Year
Domestic Product Demand:					
Motor Gasoline	6,165	6,660	6,681	6,491	6,500
Aviation Fuels	1,045	1,030	1,063	1,029	1,042
Middle Distillates	3,409	2,708	2,435	3,154	2,925
Residual Fuel Oil	2,027	1,618	1,650	1,826	1,760
Liquified Gases	1,691	1,381	1,305	1,605	1,495
Other Products	1,533	1,784	1,908	1,734	1,740
Total	**15,870**	**15,181**	**15,042**	**15,839**	**15,482**
Exports:	685	665	635	640	656
Total Demand:	**16,555**	**15,846**	**15,677**	**16,479**	**16,138**
Stock Change All Oils:	**−407**	**+19**	**+575**	**−107**	**+23**
Total Supply					
Domestic Production:					
Crude Oil	8,550	8,550	8,550	8,550	8,550
Natural Gas Liquids	1,542	1,523	1,524	1,541	1,532
Total	**10,092**	**10,073**	**10,074**	**10,091**	**10,082**
Required Imports:					
Crude Oil (a)	3,686	3,659	4,016	3,962	3,832
Motor Gasoline	168	186	192	174	180
Aviation Fuels	36	31	36	37	35
Middle Distillates	152	115	129	156	138
Residual Fuel Oil	860	685	739	814	774
Liquified Gases	289	227	219	268	251
Other Products	168	211	199	190	192
Total	**5,359**	**5,114**	**5,530**	**5,601**	**5,402**
Other Supply	697	678	648	680	677
Total Supply:	**16,148**	**15,865**	**16,252**	**16,372**	**16,161**
Closing Stocks:					
Motor Gasoline	239.4	223.7	222.5	231.0	231.0
Aviation Fuels	40.8	41.2	40.2	40.7	40.7
Middle Distillates	127.1	135.4	176.0	163.8	163.8
Residual Fuel Oil	52.7	57.1	64.0	65.5	65.5
Liquified Gases	100.8	110.5	129.3	120.7	120.7
Other Products	59.2	59.3	53.6	55.5	55.5
Total Products	**620.0**	**627.2**	**685.6**	**677.2**	**677.2**
Unfinished Oils	118.6	120.2	119.6	118.4	118.4
Natural Gas Liquids	14.6	13.5	13.8	13.7	13.7
Crude Oil (a)	346.5	340.6	335.5	335.4	335.4
Total All Oils:	**1,099.7**	**1,101.5**	**1,154.5**	**1,144.7**	**1,144.7**
Crude Runs to Stills:	**12,023**	**12,136**	**12,442**	**12,373**	**12,247**

(a) Excludes imports for and stocks in U.S. Strategic Storage.

Source: Independent Petroleum Assn. of America, Supply & Demand Committee, October, 1982.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CONN
R.I.
N.J.
MD.
DEL.
ILLINOIS
INDIANA
VIRGINIA
NORTH CAROLINA
TENNESSEE
OKLAHOMA
ARKANSAS
SOUTH CAROLINA
NEW MEXICO
MISSISSIPPI
LOUISIANA
FLORIDA
▨ States which constitutionally prohibit diversion of motor fuel taxes to non-highway uses.
☐ States which have no such provisions

State Tax Collections — 1982

State	Gasoline tax rates per gal. (a) 12/31/82	Total state motor fuel tax revenues (Add 000) 1982(b)	1981	% Change
Alabama	11.0¢	$244,003	$247,127	-1.3%
Alaska	8.0	16,258	15,019	8.2
Arizona	8.0	139,035	127,339	9.2
Arkansas	9.5	129,770	131,001	-0.9
California	7.0	816,212	812,071	0.5
Colorado	9.0	139,914	123,618	13.2
Connecticut	11.0	148,161	159,221	-7.0
Delaware	11.0	36,110	30,767	17.4
Dist. of Columbia	13.0	24,933	20,294	22.9
Florida	8.0	445,607	419,750	6.2
Georgia	7.5	247,904	248,501	-0.4
Hawaii	8.5	25,513	27,085	-5.8
Idaho	11.5	56,879	54,764	3.9
Illinois	7.5	365,846	367,484	-0.4
Indiana	10.5	354,470	292,590	21.1
Iowa	13.0	210,254	157,818	33.2
Kansas	8.0	149,890	115,286	30.0
Kentucky	10.1	193,029	194,026	-0.5
Louisiana	8.0	197,899	191,665	3.3
Maine	9.0	49,544	48,131	2.9
Maryland	9.0	191,858	187,574	2.3
Massachusetts	11.2	258,071	266,097	-3.0
Michigan	11.0	448,091	444,483	0.9
Minnesota	13.0	286,066	248,791	15.0
Mississippi	9.0	135,150	118,397	14.1
Missouri	7.0	194,375	194,218	0.1
Montana	9.0	51,973	48,175	7.9
Nebraska	13.9	123,320	125,531	-1.8
Nevada	10.5	64,429	44,890	43.5
New Hampshire	14.0	55,838	52,698	6.0
New Jersey	8.0	279,659	279,621	0.0
New Mexico	9.0	83,886	76,581	9.5
New York	8.0	464,004	466,425	-5.2
North Carolina	12.0	386,912	329,343	17.5
North Dakota	8.0	34,074	34,490	-1.2
Ohio	12.3	587,873	435,660	34.9
Oklahoma	6.5	140,131	132,256	6.0
Oregon	8.0	120,656	87,973	37.2
Pennsylvania	11.0	562,435	638,889	-12.0
Rhode Island	12.0	44,000	43,194	1.9
South Carolina	13.0	227,086	205,245	10.6
South Dakota	13.0	55,571	53,606	3.7
Tennessee	9.0	288,751	249,200	14.7
Texas	5.0¢	489,313	487,022	4.7%
Utah	11.0	92,135	75,959	21.3
Vermont	11.0	27,280	22,662	20.4
Virginia	11.0	321,734	319,206	0.8
Washington	13.5	255,295	256,822	-0.6
West Virginia	10.5	97,440	96,456	1.0
Wisconsin	13.0	333,242	240,743	38.4
Wyoming	8.0	36,901	38,039	-3.0
Total	**9.5¢**	**$10,725,729**	**$10,083,810**	**6.4%**

(a) Tax rate for highway use: does not include federal or local taxes. (b) Preliminary
Source: Federal Highway Administration.

Federal Collections (Add 000)

Year	Gasoline(a)	Diesel and special fuels(a)	Lube oil(b)	Total
1982 (c)	$3,854,363	$589,933	$77,822	$3,854,363
1981	3,801,795	570,477	74,695	4,446,967
1980	4,019,481	518,352	78,835	4,616,668
1979	4,282,919	508,595	82,335	4,873,849
1978	4,381,950	488,064	79,047	4,949,061
1977	4,229,721	452,631	78,830	4,761,182
1976	4,140,924	408,560	70,135	4,619,619
1975	3,884,483	362,675	66,124	4,313,282
1974	3,854,505	373,302	78,155	4,305,962
1973	3,958,682	358,120	86,266	4,403,068
1972	3,736,545	321,551	85,841	4,143,937
1971	3,513,927	275,159	67,130	3,856,216
1970	3,408,505	264,815	65,862	3,739,182
1969	3,172,243	240,650	86,338	3,499,231

(a) 4¢ gal.; (b) 6¢ gal.; (c) Figures for 1982 are fiscal year gross collections that went to the Highway Trust Fund, since net IRS calendar year information was not available. All other figures represent calendar year net collections after refunds and include the taxes the federal government pays on its own purchases.
Source: U.S. Department of Transportation, Federal Highway Administration.

Outlook Bright for Auto Parts and Services

The economic slowdown didn't seem to hamstring the automotive products and services business in 1982. The most recent report from the Bureau of Industrial Economics of the U.S. Department of Commerce says total sales jumped 5.6% between 1981 and 1982, and another 9.2% jump is forecast for between 1982 and 1983. The Commerce Department now anticipates that 1983 will be a $9-billion-plus year for automotive products and services sales.

Average sales per establishment are still growing too, the government bureau says. They rose 5.4% between 1981 and 1982 and are expected to go up another 4.2% this year. The number of establishments, while increasing slowly, isn't making the headway that had been projected in January of 1982. At that time, it was believed the population would be close to 41,000 by the end of 1982 and would top 43,000 in 1983. The new forecast now credits 1982 with only 39,721 establishments and predicts that the 1983 population will be close to 41,500 by next December.

Automotive Products and Services (a)

	1983(b)	1982(b)	1981(b)
Total number of establishments:	41,496	39,721	39,616
Company-owned	4,178	4,106	4,126
Franchisee-owned	37,318	35,615	35,490
Total Sales of products and services: (Add $000) (c)	9,269,724	8,491,612	8,039,069
Company-owned (c)	2,779,796	2,601,690	2,436,912
Franchisee-owned (c)	6,489,928	5,889,922	5,602,157
Average sales per establishment (c)	$223,000	$214,000	$203,000
Company-owned	665,000	634,000	590,000
Franchisee-owned	174,000	165,000	158,000
Employment	NA	NA	170,260
Company-owned	NA	NA	33,900
Franchisee-owned	NA	NA	136,360

(a) Includes tire, battery and accessory stores; auto and truck wash services; and brake and muffler repair and service; (b) Data estimated by respondents; (c) Includes sales of non-automotive products such as household appliances, garden supplies, etc.
Source: "Franchising in the Economy, 1981-1983," Bureau of Industrial Economics, U.S. Department of Commerce.

Drain Intervals

1983 Crankcase Drain Intervals and Recommended Oil

		Normal Service		Severe Service		
Make	Engine	Miles	Months	Miles	Months	Type of Oil
American Motors	All	7,500	7.5	2,500(a)	—	SF
Chrysler Dodge Plymouth	All	7,500	12	3,000	3	SF
Ford	—	—	—	—	—	—
Lincoln	4 (Turbo)	6,000	12	3,000	3	SF SF-CC SF-CD
Mercury	Others	7,500	12	3,000	3	SF SF-CC SF-CD
General Motors	Gasoline	7,500	12	3,000	3	SF SF-CC SF-CD
	4-cyl. Diesel	3,750	12	2,500	SF-CC	
	6&8-cyl. Diesel	5,000	—	2,500	3	SF-CC SF-CD

(a) Eagle only
Source: Gousha/Chek-Chart.

1983 Automatic Transmission Fluids and Drain Recommendations

		Normal Service		Severe Service	
Make	Fluid	Months	Miles	Months	Miles
American Motors	Dexron II	A	(b)	30	30,000
Chrysler	Dexron II (a)	—	(b)	—	15,000
Ford	Dexron II	—	(b)	—	30,000
		—	(b)	22½	22,500
General Motors	Dexron II (a)	—	100,000	—	15,000

(a) Including automatic transaxles.
(b) Drain not required for normal service.
Source: Gousha/Chek-Chart.

1983 Chassis Lubrication Intervals

	Normal Service		Severe Service			
Make	Months	Miles	Month	Miles	Type	Part Specification No.
American Motors	15(a)	15,000(a)	Shorter	Intervals	#2 Lithium	8991230
Chrysler	36	30,000	18(b)	15,000	#2 Barium EP	2525035
Ford	—	30,000	Shorter	Intervals	#2 Lithium (suspension)	MIC75-B
					#4-5 Lithium (steering)	MIC92-AII
General Motors	12	7,500	Shorter	Intervals	#1-2 Multipurpose EP	6031-M

(a) Eagle 7.5 months/12,500 miles; (b) Except front-wheel drive models; (c) Diesel engine cars: 5,000 miles.
Source: Gousha/Chek-Chart. Reprinted with permission.

Outlook for Tires and Batteries at Stations

Year	Replacement passenger tire shipments: Total (in millions)	Replacement passenger tire shipments: Station sales (a) (in millions)	Replacement passenger tire shipments: Average per station (a)	Replacement automotive-type battery shipments: Total (in millions)	Replacement automotive-type battery shipments: Station sales (a) (in millions)	Replacement automotive-type battery shipments: Average per station (a)
1982	132	26.4	182.5	54.2	16.3	113
1981	126	25.2	166.6	53.6	16.1	106
1980	107	21.4	135	50.0	15.0	95
1979	122	24.4	148	53.7	16.1	102
1978	135	27.0	157	56.3	16.9	102
1977	130	26.0	148	54.6	16.4	95
1976	123	24.6	132	49.2	14.8	84
1975	125	23.7	125	42.6	12.7	67
1974	124	24.8	127	44.4	13.3	68
1973	142	28.4	130	43.5	13.1	60
1972	140	28.0	127	43.2	13.0	59
1971	135	27.0	123	39.1	11.7	53
1970	130	26.0	118	37.9	11.4	51
1969	129	25.8	117	35.5	10.7	48
1968	121	24.2	110	33.8	10.1	46

(a) Estimates based on service stations holding 20% of the replacement market, and 30% of the replacement battery market; (b) In 1977, Rubber Manufacturers Assn. changed its base and eliminated motorcycle tires from the passenger tire shipments; all data, including that of 1976, have been restated to reflect this change; in addition, service-station totals have been revised to reflect a population of 184,400 in 1976; 176,465 in 1977; 172,230 in 1978; 164,752 in 1979; 158,540 in 1980; 151,250 in 1981; 144,690 in 1982—all estimates from 1978 on. Tire and battery totals otherwise from Rubber Manufacturers Assn. and Battery Council International.

Battery Shipments Hold Own in 1982

Battery shipments (replacement and original equipment) rose slightly—only 0.8%—in 1982, but did, nevertheless, increase, according to Battery Council International. Replacements were up 1.2% for the year, while original equipment declined 1.7%. Although the totals for the year were nothing to get excited about, they were definitely on the plus side for the second year in a row after two consecutive negative years (see table at right).

(Add 000)

Year	Replacements	% of Market	New cars & trucks	% of Market	Total market	% Change from previous year
1982	54,214	87.4%	7,819	12.6%	62,033	0.8%
1981	53,598	87.1	7,956	12.9	61,554	6.0
1980	50,063	86.2	8,009	13.8	58,072	-11.0
1979	53,746	82.4	11,480	17.6	66,226	-6.2
1978	56,389	81.4	12,910	18.6	62,299	3.0
1977	54,601	81.2	12,639	18.8	67,240	10.8
1976	49,202	81.0	11,477	19.0	60,679	17.6
1975	42,582	82.5	8,985	17.6	51,567	-5.3
1974	44,408	81.5	10,058	18.5	54,466	-2.9
1973	43,453	77.5	12,637	22.5	56,090	2.9
1972	43,220	79.3	11,271	20.7	54,491	9.5
1971	39,144	78.6	10,638	21.4	49,782	9.1
1970	37,389	81.9	8,239	18.1	45,629	0.5

Source: Replacement battery figures supplied by Battery Council International. New cars and trucks are U.S. factory sales figures provided by Motor Vehicle Manufacturers Assn.

Replacement Batteries

Total replacement battery shipments totaled 54.2-million units in 1982, with 12-volt and 6-volt automotive batteries accounting for 91.1% of the total, according to Battery Council International in its annual sales and activity report.

Replacement Batteries

Passenger cars and light trucks:

12-Volt: 44,207,764, or 81.5% of the total; 6-volt: 1,460,738, or 2.7% of the total.

Heavy duty commercial:

12-Volt: 2,002,945, or 3.4% of the total; 6-volt: 1,719,726, or 3.2% of the total.

Original Equipment

Passenger cars and light trucks:

12-Volt: 7,384,460, or 88.2% of the total; 6-volt: 31,169, or 0.4% of the total.

Heavy duty commercial:

12-Volt: 427,775, or 5.1% of the total; 6-volt: 80,946, or 1.0% of the total.

Source: Battery Council International.

Where Batteries Are Sold

Shipment in Units

Channels of Distribution	1982 (a) Private Brands	1982 (a) Mfr.'s Own Brand	1982 (a) Total	1981 (a) Private Brands	1981 (a) Mfr's Own Brand	1981 (a) Total
Gasoline & Oil	2,196,499	325,937	2,522,436	2,678,353	407,476	3,085,829
Tires & Rubber	1,852,582	331,496	2,184,078	1,569,843	750,740	2,320,583
Mass Merchandisers (Department and Discount Stores)	13,655,053	184,167	13,839,220	14,255,477	140,915	14,396,392
Mass Merchandisers (Auto Chains and Others)	4,577,363	230,890	4,808,253	4,133,712	791,568	4,925,280
Fleet Operations	10,316	300,879	311,195	5,513	308,712	314,225
Vehicle & Equipment Manufacturers	2,997,343	357,795	3,355,138	1,994,248	381,826	2,376,074
Parts Distributors	3,785,244	4,978,878	8,764,122	4,143,845	5,775,519	9,919,364
Battery Specialists	11,991,969	3,750,970	15,742,939	9,774,679	4,330,742	14,105,421
Others	318,600	823,682	1,142,282	115,249	656,571	771,820
Total	**41,384,969**	**11,284,694**	**52,669,663**	**38,670,919**	**13,214,988**	**52,214,988**

(a) Figures are based on 20 reporting companies; also 1982 figures are preliminary.
Source: Battery Council International.

Tire Shipments Flounder in '82

Like the automobile industry itself, tire shipments in 1982 were not anything to be happy about. Just about everything fell below the 1981 levels—everything except replacement tire shipments in the passenger car/motorcycle areas. These were up roughly 5-million units, or 4.1%. The only conclusion that can be drawn here is that people are keeping their cars longer and are replacing tires more readily than in bygone years. The slippage in 1982 followed on the heels of a relatively good year in 1981.

1982 Compared With 1981

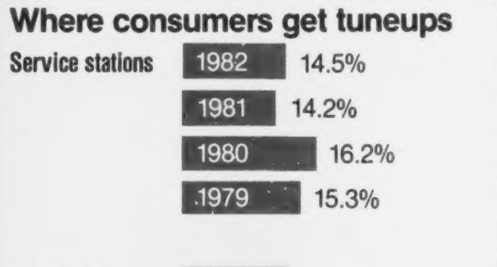
	Passenger/ Motorcycle	Bus/ Truck	Farm Implement	Total by Type of Market
Original Equipment	-5.6%	-18.8%	-37.2%	-8.5%
Replacement	4.1	-1.1	-13.1	2.9
Export	-24.3	-41.8	-33.5	-30.5
Total by Type ...	**1.2%**	**-5.8%**	**-23.1%**	**-0.5%**

Source: NPN based on Rubber Manufacturers Statistical Report, Monthly.

Auto, Truck and Farm Tire Shipments

	Type of Tire (Add 000)							
	Passenger/ Motorcycle	% of Market	Bus/ Truck	% of Market	Farm Equipment	% of Market	Total of Market Type	% of Total
1982								
Original Equipment	34,150	85.8%	4,652	11.7%	1,003	2.8%	39,805	19.3%
Replacement	131,563	81.3	28,149	17.4	2,108	1.3	161,820	78.6
Export	3,051	73.8	966	23.4	115	2.8	4,132	2.0
Total	**168,764**	**82.0%**	**33,767**	**16.4%**	**3,226**	**1.6%**	**205,757**	——
1981								
Original Equipment	36,167	83.2%	5,732	13.2%	1,597	3.7%	43,496	21.0%
Replacement	126,415	80.4	28,453	18.1	2,427	1.5	157,295	76.1
Export	4,113	69.2	1,661	27.9	173	2.9	5,947	2.9
Total	**116,695**	**80.6%**	**35,846**	**17.3%**	**4,197**	**2.0%**	**206,738**	——

Source: Rubber Manufacturers Assn. Statistical Report, Monthly.



Where consumers get tuneups

Source: Champion Spark Plug Co.

Antifreeze Sales

	(Add 000 gal.) Type		
Year	Ethylene glycol	Methanol	Total
1981	179,843	(*)	179,843
1980	184,340	(*)	184,340
1979	154,240	(*)	154,240
1978	137,161	(*)	137,161
1977	142,308	(*)	142,308
1976	143,332	(*)	143,332
1975	217,675	(*)	217,675
1974	186,936	(*)	186,936
1973	208,540	(*)	208,540
1972	200,703	(*)	200,703
1971	192,647	430	193,647
1970	177,606	455	178,061
1969	163,484	743	164,226
1968	152,438	1,138	153,576
1967	142,190	1,500	143,690

(*) Survey no longer conducted.
Source: Chemical Specialties Manufacturers Assn.

Ethylene Glycol-Base Antifreeze Sales—1981

	(Add 000 gal.)	
	Civilian	Government
Packaged ethylene glycol antifreeze sold in:		
quarts and gallons	113,129	—0—
drums	9,957	*
Bulk ethylene glycol antifreeze (or ethylene glycol for antifreeze) sold to packagers	39,439	*
Bulk ethylene glycol antifreeze (or ethylene glycol for antifreeze) sold to motor-vehicle manufacturers for "drive-away" or factory-fill use	14,914	—0—
Total	**177,439**	**2,405**
Grand Total (Civ. and Govt.)		**179,843**

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*Insufficiently reported.
Source: Chemical Specialties Manufacturers Assn.

Oil Jobbers and TBA: 60% Do It

A Hunter Publishing Co. survey shows that six out of every 10 jobbers handle one or more TBA items. The ratio is higher in the Far West—seven out of 10. On the other hand, in the populous Northeast, the ratio dips to roughly four out of 10.

A third of the jobbers participating in the survey say they sell more than $100,000 worth of TBA items a year while a much smaller percentage, 6.5%, do more than $500,000 a year. The survey also shows that TBA sales account for 8.5% of the total dollar sales for the average TBA-oriented jobber.

Jobber involvement in TBA is heavy in oil and filters (46% of all jobbers carry these items); spark plugs (24%); windshield wiper refills (26.9%); ignition point sets (19.4%); belts (26%); radiator hose (22.5%); batteries (37.5%); lamps (26.6%); sealed beam headlights (27.2%); thermostats (20.6%); antifreeze (56.2%); and additives (26.8%).

The percentage of all jobbers handling shock absorbers (17.8%); mufflers (12.9%); brake shoes and pads (14.1%); oil and grease seals (13.3%); wire and cable products (13.3%); and air conditioning Freon (13.1%) is also substantial.

The Hunter Survey was made in 1982 by Great Lakes Marketing, an independent research firm.

The highlights are as follows:

Jobbers Handling Minimum One TBA Line

Total Response		Northeast		North Central		South		West	
No.	%	No.	%	No.	%	No.	%	No.	%
720	60.6	48	37.8	268	64.6	254	59.9	131	69.7

Annual TBA Sales Volume (TBA Handling Jobbers)

Annual TBA Sales Volume	Number of Respondents	% of Respondents
$ 1,000-19,999	164	33.2%
20,000-29,999	42	8.5
30,000-39,999	28	5.7
40,000-49,999	16	3.2
50,000-99,999	85	17.2
100,000-199,999	73	14.7
200,000-499,999	54	10.9
500,000 and Over	32	6.5
Mean Average		**$258,349**

TBA Percentage of Total Sales

TBA % of Total Jobber Sales	Number of Respondents	% of Respondents
1%	174	36.3%
2	49	10.2
3	23	4.8
4	15	3.1
5	61	12.7
6	5	1.0
7	7	1.5
8	11	2.3
9	4	.8
10	51	10.6
Over 10	79	16.3
Mean Average		**8.5%**

Jobber TBA Customer Types

Customer Type	Number of Respondents	% of Respondents (a)	% of TBA Sales Volume (b)
Service Stations Your Firm Owns & Operates	318	61.0%	34.1%
Service Stations Your Firm Owns & Leases	226	43.4	17.4
Other Service Stations	240	46.1	17.2
Repair Garages	119	22.8	3.4
Auto Parts Jobbers	47	9.0	1.7
Car/Truck Dealers	61	11.7	1.2
Retail Auto Parts Stores	47	9.0	1.5
Fleets	109	20.9	4.2
Farms	162	31.1	9.5
Marines	17	3.3	.2
Other	53	10.1	9.5

(a) Column three refers to the numbers cited in column two.
(b) Column four refers exclusively to those who sell to the given customer type.
Source: NPN/Hunter Publishing Co., April, 1982.

Storage Capacity at U.S. Refineries (a)

The year 1980 may have been the peak year for shell storage capacity for crude oil and petroleum products at the refineries operated by U.S. oil companies. In 1981 and again in 1982, many refineries were shut down permanently or were mothballed in such a way that they could be reactivated within 90 days or so. But the mere fact that 80 refineries closed their doors permanently in the two-year period, taking with them more than 1.5-million b/d of operable refining capacity, makes it clear that a substantial amount of storage went down the drain too. (For details on refinery closings, see the Refinery section.)

National Petroleum Council, which made the last survey of the industry at the request of the federal government, is again taking another reading. The results, however, are not expected to be available for perhaps a year or more. It takes a long time to collect the details, sort them out, eliminate duplication and arrive at a reasonable figure that will satisfy both government and industry as to accuracy and fairness. The capacity figures in the table below do not give any consideration to the storage caverns in the Southwest that the government is now using for its Strategic Petroleum Reserve of crude oil.

The capacity below is considered primary capacity. It does not involve the millions of gallons of tankage that is owned and operated at the secondary level by jobbers and distributors and suppliers. American Petroleum Institute is attempting to work out a formula to estimate the secondary storage capacity but at this time it is still in the concept stage.

(Add 000 bbl.)

P.A.D. Districts	Crude Oil	Gasoline Finished Leaded	Gasoline Finished Unleaded	Gasoline Blending Components	Gasoline Total	Middle Distillates	Residual Oils	Total Products(b)	Total Crude Oil and Products
P.A.D. District 1									
Delaware, Maryland	3,032	542	342	1,089	1,973	1,339	274	8,292	11,314
Florida, Georgia, North Carolina, Virginia	3,162	296	368	537	1,201	1,085	1,232	4,346	7,508
New Jersey	9,743	1,378	1,729	3,520	6,627	7,462	3,369	21,337	31,080
New York, New Hampshire	1,830	219	217	292	728	1,160	1,206	4,147	5,977
Pennsylvania	10,058	3,602	2,504	1,014	7,120	5,771	3,607	24,218	34,276
West Virginia	286	93	56	0	149	115	57	745	1,031
Total District 1	**28,111**	**6,130**	**5,216**	**6,452**	**17,798**	**16,932**	**9,745**	**63,075**	**91,186**
P.A.D. District 2									
Illinois	7,540	3,610	2,582	5,723	11,915	7,050	2,367	31,631	39,171
Indiana	2,313	1,132	1,033	2,973	5,138	3,241	2,872	20,345	22,658
Kansas	3,387	2,752	1,009	2,193	5,954	3,794	1,264	17,953	21,340
Kentucky, Tennessee	2,111	932	477	287	1,696	1,194	821	5,406	7,517
Michigan	3,128	674	466	412	1,552	1,868	1,111	8,310	11,438
Minnesota, Wisconsin	3,257	2,293	795	161	3,249	2,103	1,205	9,774	13,031
North Dakota	375	337	253	617	1,207	798	125	2,384	2,759
Ohio	3,261	2,602	1,851	2,144	6,597	3,208	720	14,637	17,898
Oklahoma	4,057	3,747	1,674	2,017	7,438	5,557	1,088	17,885	21,942
Total District 2	**29,429**	**18,079**	**10,140**	**16,527**	**44,746**	**28,813**	**11,573**	**128,325**	**157,754**
P.A.D. District 3									
Alabama	1,170	178	115	770	1,063	865	1,360	4,313	5,483
Arkansas	1,264	104	149	138	391	661	90	1,924	3,188
Louisiana	23,515	3,987	4,082	9,917	17,986	13,569	6,180	63,640	87,155
Mississippi	3,754	1,444	703	1,667	3,814	2,196	945	8,815	12,569
New Mexico	1,023	481	226	276	983	574	488	2,737	3,760
Texas	49,195	12,687	10,233	21,370	44,290	26,822	16,818	172,754	221,949
Total District 3	**79,921**	**18,881**	**15,508**	**34,138**	**68,527**	**44,687**	**25,881**	**254,183**	**334,104**
P.A.D. District 4									
Colorado	440	591	217	348	1,156	375	421	2,717	3,157
Montana	1,558	1,277	527	1,203	3,007	1,467	274	6,375	7,933
Utah	1,235	717	334	1,087	2,138	1,116	498	5,254	6,489
Wyoming	1,729	1,532	623	976	3,131	1,508	811	8,505	10,234
Total District 4	**4,962**	**4,117**	**1,701**	**3,614**	**9,432**	**4,466**	**2,004**	**22,851**	**27,813**
P.A.D. District 5									
California	30,566	5,204	6,043	10,110	21,357	7,934	17,030	71,241	101,807
Washington	7,852	1,321	1,085	1,305	3,711	1,091	984	9,761	17,613
Other States	2,842	263	114	661	1,038	843	1,487	4,737	7,579
Total District 5	**41,260**	**6,788**	**7,242**	**12,076**	**26,106**	**9,868**	**19,501**	**85,739**	**126,999**
Total U.S.	**183,683**	**53,995**	**39,807**	**72,807**	**166,609**	**104,766**	**68,704**	**554,173**	**737,856**

(a) As of Jan. 1, 1981; (b) total products includes asphalt, road oil, lube oil, propane, butane, jet fuel and miscellaneous items.
Source: National Petroleum Council.

Service Job Analysis: Who's Doing What in Service Bays

The 1981 Service Job Analysis reports on over 250 service jobs performed or products sold by approximately 323,000 repair outlets nationwide. Sixth in a series of triennial aftermarket studies done by Hunter Publishing Co., the survey included 120,000 service stations, 136,000 independent repair shops, 28,000 new car/truck dealer service departments, and 39,000 self-service fleet repair locations. A breakout covering only service stations begins on page 185.

Total Jobs Performed by All Shops (Universe—323,000 Shops)

		... by Type of Outlet (add 000)							
Job Description	Total Jobs Performed (add 000)	Service Stations	% of Jobs	Independent Repair Shops	% of Jobs	New Car/Truck Dealer Shops	% of Jobs	Self-Serviced Fleet Shops	% of Jobs
Lube Jobs (Car)	119,570	63,829	53.4	23,643	19.8	29,135	24.4	2,963	2.5
Lube Jobs (Truck/Bus)	26,610	8,450	31.8	4,177	15.7	3,756	14.1	10,227	38.4
Oil Changes (Car/Truck)	149,794	75,884	50.7	28,256	18.9	34,223	22.8	11,431	7.6
Oil Filters Replaced (Car/Truck)	142,334	69,650	48.9	28,884	20.3	31,768	22.3	12,059	8.5
Air Filters Replaced	50,040	23,053	46.1	14,367	28.7	8,728	17.4	3,892	7.8
Carburetors Installed (New)	1,460	557	38.2	600	41.1	192	13.2	111	7.6
Carburetors Installed (Rebuilt)	1,717	836	48.7	483	28.1	270	12.2	188	10.9
Carburetors Cleaned on Vehicles	7,920	3,431	43.3	2,663	33.6	1,456	18.4	370	4.7
Carburetors Overhauled (In Shop)	8,083	1,718	21.3	3,835	47.4	2,013	24.9	517	6.4
Fuel Pumps Installed (New)	4,365	1,476	33.8	1,864	42.7	746	17.1	279	6.4
Fuel Pumps Installed (Rebuilt)	1,181	514	43.5	353	29.9	205	17.4	109	9.2
Fuel Filters Replaced	41,965	13,496	32.2	15,344	36.6	8,457	20.2	4,668	11.1
Engine Tune-Ups (Car)	46,291	15,767	34.1	17,477	37.8	11,870	25.6	1,177	2.5
Engine Tune-Ups (Truck/Bus)	9,701	1,871	55.1	3,345	34.5	2,062	21.3	2,423	25.0
Spark Plugs (New)	297,412	95,091	32.0	122,753	41.3	63,786	21.4	15,782	5.3
Spark Plugs (Clnd/Regapped/Reinstalled)	31,812	12,133	38.1	11,411	35.9	4,599	14.5	3,669	11.5
Batteries Sold	21,540	10,736	49.8	5,729	26.6	2,641	12.3	2,434	11.3
Batteries Recharged	37,384	22,773	60.6	8,344	22.2	3,602	9.6	2,865	7.6
Battery Cables Sold	12,721	6,631	52.1	3,567	28.0	1,362	10.7	1,161	9.1
Alternators Installed (New)	1,620	666	41.1	524	32.3	277	17.1	153	9.4
Alternators Installed (Rebuilt)	10,995	4,686	42.6	4,332	39.4	1,055	9.6	922	8.4
Voltage Regulators Installed (New)	6,665	2,442	36.6	2,661	39.9	1,171	17.6	391	5.9
Voltage Regulators Installed (Reblt)	764	269	35.2	286	37.4	124	16.2	85	11.1
V-Belts Installed (All Types)	45,580	21,908	48.1	14,488	31.8	5,570	12.2	3,614	7.9
Radiator Hose Replaced (Rubber)	20,219	9,908	49.0	6,302	31.2	2,573	12.7	1,436	7.1
Radiator Hose Replaced (Silicone)	853	356	41.7	136	15.9	151	17.7	210	24.6
Heater Hose Replaced (Rubber)	14,390	5,972	41.5	5,725	39.8	1,575	10.9	1,118	7.8
Heater Hose Replaced (Silicone)	871	275	31.6	314	36.1	153	17.6	129	14.8
Permanent Anti-Freeze Sold (Gals)	67,581	30,408	45.0	17,238	25.5	10,913	16.1	9,022	13.3

Total Jobs Performed (cont.'d)

		... by Type of Outlet (add 000)							
Job Description	Total Jobs Performed (add 000)	Service Stations	% of Jobs	Independent Repair Shops	% of Jobs	New Car/Truck Dealer Shops	% of Jobs	Self-Serviced Fleet Shops	% of Jobs
Mufflers Replaced (Car)	11,461	5,083	44.4	4,572	39.9	1,590	13.9	216	1.9
Mufflers Replaced (Truck/Bus)	2,808	638	22.7	1,161	41.3	305	10.9	704	25.1
Tires Sold (Car-New)	30,070	19,354	64.4	7,362	24.5	2,729	9.1	625	2.1
Tires Sold (Truck/Bus-New)	4,039	1,671	41.4	1,000	24.8	278	6.9	1,090	27.0
Retread Tires Sold (Car)	3,802	1,929	50.7	1,238	32.6	260	6.8	375	9.9
Retread Tires Sold (Truck/Bus)	1,525	449	29.4	499	32.7	48	3.1	529	34.7
Tires Repaired	71,665	57,142	79.7	8,219	11.5	1,033	1.4	5,274	7.4
Tubes Sold (New)	6,054	4,153	68.6	1,322	21.8	98	1.6	481	7.9
Tubes Repaired	9,065	5,676	62.6	1,398	15.4	119	1.3	1,872	20.7
Engine Oil Additives Sold (Cans)	14,824	8,795	59.3	2,633	17.8	2,767	18.7	629	4.2
Gasoline Additives Sold (Cans)	18,333	12,309	67.1	3,023	16.5	2,121	11.6	880	4.8
Gear Lube Additives Sold (Cans)	2,700	1,246	46.1	640	23.7	624	23.1	190	7.0
Transmission Additives Sold (Cans)	5,306	3,018	56.9	1,716	32.3	507	9.6	65	1.2
Cooling System Additives Sold (Cans)	14,114	7,111	50.4	3,782	26.8	1,756	12.4	1,465	10.4
Cooling System Cleaner Sold (Cans)	7,541	4,228	56.1	1,606	21.3	1,253	16.6	454	6.0
Cooling System Sealer Sold (Cans)	9,417	6,550	69.6	1,841	19.5	707	7.5	319	3.4
Windshield Wiper Motors Repl. (New)	1,073	248	23.1	267	24.9	345	32.2	213	19.9
Windshield Wiper Motors Repl. (Reblt)	1,077	373	34.6	463	43.0	97	9.0	144	13.4
Windshield Wiper Arms Replaced	2,757	1,010	36.6	730	26.5	477	17.3	540	19.6
Windshield Wiper Refills Installed	34,614	21,132	61.1	7,634	22.1	4,044	11.7	1,804	5.2
Windshield Wiper Blades Replaced	21,889	10,527	48.1	5,145	23.5	3,464	15.8	2,753	12.6
Windshield Washer Pumps Replaced	2,759	1,073	38.9	1,053	38.2	457	16.6	176	6.4
Wash Jobs (Car-Automatic)	28,931	16,897	58.4	4,923	17.0	6,054	20.9	1,057	3.7
Wash Jobs (Truck/Bus-Automatic)	7,751	563	7.3	197	2.5	992	12.8	5,999	77.4
Engines Steam Cleaned (External)	6,331	888	14.0	1,350	21.3	1,902	30.0	2,191	34.6
Gasoline Pumps (Number)	765	651	85.1	54	7.1	6	.8	54	7.9
Service Bays (Number)	1,297	271	20.9	518	39.9	32.9	25.4	179	13.8

Jobs Performed by Service Stations (Universe—120,000 Stations)

			... by Census Region (add 000)								
Job Number and Description	% Stations Performing	Total Jobs Performed (add 000)	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Lube Jobs (Car)	98.4	63,829	2,417	7,505	12,006	5,469	9,991	3,328	7,859	2,127	13,127
Lube Jobs (Truck/Bus)	67.9	8,450	385	774	1,414	945	1,516	568	824	715	1,309
Oil Changes (Car)	96.6	68,121	2,838	8,167	12,568	6,020	10,688	3,447	8,065	2,250	14,078
Oil Filters Replaced (Car)	97.0	63,019	2,752	7,713	11,417	6,095	9,869	3,333	6,994	2,111	12,735
Air Filters Replaced	86.1	23,053	1,508	2,867	4,450	1,954	3,952	732	2,780	1,137	3,673
Front Wheels Repacked (Car)	84.3	11,602	424	1,495	2,697	1,108	1,701	374	1,321	678	1,804
Oil Changes (Truck/Bus)	65.8	7,763	365	914	1,090	809	1,412	427	844	703	1,199
Oil Filters Replaced (Truck/Bus)	63.1	6,631	287	746	895	658	1,097	550	546	461	1,391

U.S. Refineries and Capacities by States

(Crude Oil Operating Capacity on Jan. 1, 1982)

Company	b/d
Alabama	
Coral Petroleum, Tuscaloosa	10,500
Hunt Oil Co., Tuscaloosa	35,500
Louisiana Land & Exploration Co., Mobile	41,300
Marion Corp., Theodore	25,500
Mobile Bay Refining Co., Chickasaw.	26,600
Warrior Asphalt Co. of Alabama, Holt	5,500
Total	**142,900**
Alaska	
Atlantic Richfield Co., North Pole	14,200
Chevron U.S.A., Kenai	22,000
Earth Resources Co. of Alaska, North Pole	45,323
Tesoro Petroleum Corp., Kenai	48,500
Total	**130,023**
Arizona	
Arizona Fuels Corp., Fredonia	4,015
Total	**4,015**
Arkansas	
Berry Petroleum Co., Stephens	3,300
Cross Oil & Refining Co. of Arkansas, Smackover	6,800
Mcmillan Ring-Free Oil Co., Norphlet	4,400
Tosco Corp., El Dorado	38,500
Total	**53,000**
	***11,200**
California	
American Ultramar (formerly Bedcon Oil Co.,), Hanford	11,300
Anchor Refining Co. McKittrick	10,000
Atlantic Richfield Co., Carson	166,000
Champlin Petroleum Co., Wilmington	60,000
Chevron U.S.A., Bakersfield	26,000
El Segundo	390,000
	*15,000
Richmond	294,000
	*71,000
Coastal Petroleum Co., Paloma	*10,200
Conoco (formerly Continental Oil Co.), Paramount	26,300
	*20,200
Santa Maria	9,500
Demenno Resources, Compton	10,000
ECO Petroleum, Inc., Long Beach	*11,000
Edgington Oil Co., Long Beach	41,600
Exxon Co. U.S.A., Benecia	106,000
Fletcher Oil & Refining Co., Carson	24,575
Getty Refining & Marketing Co., Bakersfield	40,900
Gibson Oil & Refining Co., Bakersfield	4,600
Golden Eagle Refining Co., Inc., Carson	16,170
Gulf Oil Co. U.S., Santa Fe Springs	51,500
Huntway Refining Co., Wilmington	5,400
Kern County Refinery, Inc., Bakersfield	21,400
Lunday-Thagard Oil Co., South Gate	12,000
Mcmillan Ring-Free Oil Co., Long Beach	12,200
Marlex Oil & Refining, Inc., Long Beach	22,000
Mobil Oil Corp., Torrance	123,500
Newhall Refining Co., Newhall	17,600
Oxnard Refinery, Oxnard	4,000
Pacific Refining Co., Hercules	*85,000
Powerine Oil Co., Santa Fe Springs	44,120
Sabre Refining, Inc., Bakersfield	*10,000
San Joaquin Refining Co., Bakersfield	10,000
Shell Oil Co., Martinez	91,400
	*12,600
Wilmington	93,000
Sunland Refining Corp., Bakersfield	12,000
	*5,000
Texaco Inc., Wilmington	75,000
Tosco Corp., Avon	126,000
Bakersfield	39,500
U.S.A. Petrochem Corp., Ventura	24,000
Union Oil Co. of California	
Arroyo Grande	41,000
Rodeo	70,000
Wilmington	86,500
	*21,500
West Coast Oil Co., Oildale	*21,000
Witco Chemical Corp., Oildale	8,000
Total	**2,233,065**
	***301,600**
Colorado	
Asamera Oil (U.S.), Commerce City	38,800
Conoco, Commerce City	32,500
Gary Refining Co., Fruita	13,100
Total	**84,400**
Delaware	
Getty Refining & Marketing Co., Delaware City	140,000
Total	**140,000**
Florida	
Seminole Refining, Inc., St. Marks	*15,000
Total	***15,000**
Georgia	
Amoco Oil Co., Savannah	24,000
Young Refining Corp., Douglasville	5,000
Total	**29,000**
Hawaii	
Chevron U.S.A., Honolulu	48,000
Total	**48,000**
Illinois	
Clark Oil & Refining Corp.,	
Blue Island	66,500
Hartford	63,600
Dillman Oil Recovery, Inc., Robinson	*1,200
Marathon Oil Corp., Robinson	120,000
	*75,000
Mobil Oil Co., Joliet	180,000
Shell Oil Co., Wood River	283,000
Texaco Inc., Lawrenceville	84,000
Union Oil Co. of California, Lemont	151,000
Total	**948,100**
	***76,200**
Indiana	
Amoco Oil Co., Whiting	380,000
Energy Cooperative, Inc., East Chicago	*126,000
Gladieux Refinery, Inc., Fort Wayne	15,800
Indiana Farm Bureau Cooperative Assn., Mt. Vernon	21,200
Industrial Fuel & Asphalt of Indiana, Inc., Hammond	*7,600
Laketon Asphalt Refining Co., Laketon	8,500
Rock Island Refining Corp., Indianapolis	43,200
Total	**468,700**
	***133,600**
Kansas	
CRA, Inc., Coffeyville	56,500
Phillipsburg	26,400
Derby Refining Co., North Wichita	27,982
E-Z Serv Refining, Inc., Shallow Water	*9,500
Getty Refining & Marketing Co., El Dorado	80,577
Mid-America Refining Co., Chanute	*3,000
Mobil Oil Corp., Augusta	50,000
National Cooperative Refinery Association. McPherson	54,000
Pester Refining Co., El Dorado	35,000
Phillips Petroleum Co., Kansas City	80,000
Total Petroleum, Inc., Arkansas City	42,500
Total	**452,959**
	***12,500**
Kentucky	
Ashland Oil, Inc., Catlettsburg	213,400
Louisville	25,200
Kentucky Oil & Refining Co., Betsy Lane	*3,000
Somerset Refinery, Inc., Somerset	5,500
Total	**244,100**
	***3,000**
Louisiana Inland	
Atlas Processing Co., Shreveport	45,000
Bayou State Oil Corp., Hosston	*3,000
Calumet Refining Co., Princeton	3,500
	*2,031
Claiborne Gasoline Co., Lisbon	6,500
Cotton Valley Solvents Co., Cotton Valley	7,800
Kerr-McGee Corp., Dubach	10,780
Port Petroleum, Inc., Stonewall	1,800
	*1,400
Schulze Processing, Inc., Tallulah	*1,760
Total	**75,380**
	***8,191**
Louisiana Gulf	
Canal Refining Co., Church Point	8,000
Cities Service Co., Lake Charles	297,000
Conoco, Egan	1,500
	*5,000
Westlake	156,500
CPI Oil & Refining, Inc. (formerly Calcasieu Refining, Ltd.,), Lake Charles	14,000
Evangeline Refining Co., Jennings	4,500
Exxon Co. U.S.A., Baton Rouge	474,000
	*19,000
GRH Energy Corp. (formerly Good Hope Refineries, Inc., Good Hope)	100,000
Gulf Oil Co., U.S., Belle Chasse	198,900
Hill Petroleum Co., Krotz Springs	*57,400
International Processors, St. Rose	28,600
LaJet, Inc., St. James	20,000
Lake Charles Refining Co., Lake Charles	*28,700
Mallard Resources, Inc., Gueydon	7,400
Marathon Oil Co., Garyville	255,000
McTan Corp. (formerly Bruin Refining, Inc.,), Mt. Airy	*19,300
Mt. Airy Refining Co., Mt. Airy	23,000
Murphy Oil Corp., Meraux	90,200
Placid Refining Co., Port Allen	40,000
Shell Oil Co., Norco	218,000
Shepard Oil Co., Jennings	*39,000
Slapco Mermentau	13,500
Sooner Refining Co., Darrow	8,000
T & S Refining Inc., Jennings	*10,500
Tenneco Oil Co., Chalmette	114,000
Texaco Inc., Convent	140,000
Total	**2,212,100**
	***211,200**
Maryland	
Amoco Oil Co., Baltimore	15,000
Chevron U.S.A., Baltimore	*14,200
Total	**15,000**
	***14,200**

Michigan

Company	b/d
Crystal Refining Co., Carson City	3,000
Lakeside Refining Co., Kalamazoo	5,600
Marathon Oil Co., Detroit	68,500
Texas American Petrochemicals, Inc., West Branch	*11,500
Total Petroleum, Inc., Alma	40,000
Total	**117,100**
	*11,500

Minnesota

Company	b/d
Ashland Oil, Inc., St. Paul Park	67,143
Koch Refining Co., Rosemount	127,300
Total	**194,443**

Mississippi

Company	b/d
Amerada Hess Corp., Purvis	30,000
Chevron U.S.A., Pascagoula	280,000
Ergon Refining, Inc., Vicksburg	20,600
Natchez Refining Co., Natchez	*16,000
Southland Oil Co., Lumberton	5,800
Lumberton	5,800
Sandersville	11,000
Vicksburg Refining, Inc., Vicksburg	7,900
Total	**355,300**
	*16,000

Missouri

Company	b/d
Amoco Oil Co., Sugar Creek	104,000
Total	**104,000**

Montana

Company	b/d
Conoco, Billings	52,500
Exxon Co. U.S.A., Billings	45,000
Farmers Union Central Exchange, Laurel	33,650
	*7,800
Flying J, Cut Bank	4,400
Kenco Refining, Inc., Wolf Point	4,700
Simmons Oil Co. (formerly Phillips Petroleum Co.,), Great Falls	6,000
Total	**146,250**
	*7,800

Nebraska

Company	b/d
CRA, Inc., Scottsbluff	5,600
Total	**5,600**

Nevada

Company	b/d
Nevada Refining Co., Tonopah	4,180
Total	**4,180**

New Jersey

Company	b/d
Amerada Hess Corp., Port Reading	*68,000
Chevron U.S.A., Perth Amboy	168,000
Exxon Co. U.S.A., Linden	260,000
	*65,000
Mobil Oil Corp., Paulsboro	99,700
Seaview Petroleum Co., Paulsboro	44,400
Texaco Inc., Westville	90,000
Total	**602,000**
	*133,000

New Mexico

Company	b/d
Caribou-Four Corners Oil Co., Farmington	2,400
Giant Industries, Inc., Farmington	13,500
Navajo Refining Co., Artesia	29,930
Plateau, Inc., Bloomfield	16,800
Shell Oil Co., Gallup	18,000
Southern Union Refining Co., Lovington	36,100
Thriftway Oil Co., Bloomfield	1,194
Total	**117,924**

New York

Company	b/d
Ashland Oil, Inc., Buffalo	64,000
Cibro Petroleum Products, Inc., Albany	33,900
Total	**97,900**

North Dakota

Company	b/d
Amoco Oil Co., Mandan	56,000
Flying J, Williston	4,250
Northland Oil & Refining Co., Dickinson	*5,000
Total	**60,250**
	*5,000

Ohio East

Company	b/d
Ashland Oil, Inc., Canton	66,000
Total	**66,000**

Ohio West

Company	b/d
Ashland Oil, Inc., Findlay	20,400
Gulf Oil Co. U.S., Cleves	43,700
Standard Oil Co. of Ohio, Lima	168,000
Toledo	120,000
Sun Co., Toledo	125,000
Total	**477,100**

Oklahoma

Company	b/d
Allied Materials Corp., Stroud	7,200
Champlin Petroleum Co., Enid	53,600
Conoco, Ponca City	118,300
Hudson Refining Co., Inc., Cushing	19,000
Kerr-McGee Corp., Wynnewood	43,000
Oklahoma Refining Co., Cyril	15,600
Thomas (formerly Petrol Oil Co.)	10,700
Okmulgee Refining Co. (formerly Basin Refining Co.) Okmulgee	*25,000
Sun Co., Tulsa	88,500
Texaco Inc., Tulsa	50,000
Tonkawa Refining Co., Arnett	11,000
Tosco Corp. Duncan	47,000
Total Petroleum, Inc. Ardmore	62,000
Total	**526,100**
	*40,400

Oregon

Company	b/d
Chevron U.S.A., Portland	*15,000
Total	*15,000

Pennsylvania East

Company	b/d
Atlantic Richfield Co., Philadelphia	125,000
BP Oil Corp., Marcus Hook	164,000
Gulf Oil Co. U.S., Philadelphia	174,100
Sun Co., Marcus Hook	165,000
Total	**628,100**

Pennsylvania West

Company	b/d
Ashland Oil, Inc., Freedom	6,800
Coral Petroleum Inc. (formerly United Refining Co.), Warren	41,000
Pennzoil Co., Rouseville	14,600
Quaker State Oil Refining Corp.	
Emlenton	0
Smethport	6,700
Witco Chemical Corp., Bradford	6,841
Total	**75,941**
	*15,600

Tennessee

Company	b/d
Delta Refining Co., Memphis	49,500
Total	**49,500**

Texas Inland

Company	b/d
American Petrofina Co. of Texas, Big Spring	60,000
Chevron U.S.A., El Paso	76,000
Clinton Manges (formerly Sector Refining Co.), Palestine	*6,000
Diamond Shamrock Corp., Sunray	71,100
Dorchester Refining Co., Mount Pleasant	24,000
White Deer	0
E-2 Refining Co. (formerly Winston Refining Co.), Fort Worth	20,000
Eagle Refining Corp., Jacksboro	*1,800
Flint Chemical Co., San Antonio	1,500
Howell Hydrocarbons, Inc., San Antonio	4,500
La Gloria Oil & Gas Co., Tyler	46,000
Liquid Energy Corp., Bridgeport	10,000
Listo Refining Co. (formerly Rancho Refining Co.), Donna	3,500
Longview Refining Co., Longview	*14,000
Petrolite Corp., Kilgore	1,000
Phillips Petroleum Co., Borger	95,000
Pioneer Refining Ltd., Nixon	13,000
Pride Refining, Inc., Abilene	33,000
Quitman Refining Co., Quitman	6,600
Shell Oil Co., Odessa	30,600
Sigmor Refining Corp., Three Rivers	32,000
TARCO, Euless	*6,000
Tesoro Petroleum Corp., Carrizo Springs	26,100
Texaco Inc., Amarillo	20,000
El Paso	17,000
Thriftway Oil Co., Graham	*1,184
Wickett Refining Co., Wickett	*8,000
Total	**591,350**
	*41,984

Texas Gulf

Company	b/d
American Petrofina Co. of Texas, Port Arthur	90,000
Amoco Oil Co., Texas City	415,000
Atlantic Richfield Co., Houston	222,000
Brio Refining, Inc. (formerly Friendswood Refining Co.), Friendswood	12,500
Bronco Refining Co., Houston	*2,250
Champlin Petroleum Co., Corpus Christi	155,000
	*15,000
Charter International Oil Co., Houston	35,000
Coastal States Petroleum Co., Corpus Christi	92,000
	*69,000
Conoco, Inc. (formerly Monsanto Co.), Alvin/Texas City	37,194
Copano Refining Co., Ingleside	*11,100
Crown Central Petroleum Corp., Pasadena	100,000
Dow Chemical U.S.A., Freeport	*190,000
Eddy Refining Co., Houston	3,250
Exxon Co. U.S.A., Baytown	540,000
Gulf Oil Co. U.S.A., Port Arthur	281,700
Gulf States Oil & Refining Co., Corpus Christi	38,000
Independent Refining Corp., Port Neches **(formerly Erickson Refining Corp.)**	*30,000
Winnie	50,000
Marathon Oil Co., Texas City	49,000
	*20,500
Mobil Oil Corp., Beaumont	277,400
	*57,600
Petraco-Valley Oil & Refining Co., Brownsville	*12,300
Phillips Petroleum Co., Sweeny	175,000
Placid Refining Co., Mont Belvieu	8,500
Quintana Petrochemical Co. (formerly Neuces Petrochemical Co.), Corpus Christi	33,300
Rio Grande Crude Refining (formerly Gulf Energy Refining Corp.), Brownsville	*9,500
Rio Grande Recovery Systems, Inc. (formerly Val Verde International), Brownsville	*1,000
Saber Refining Co., Corpus Christi	*19,000
Sentry Refining, Inc., Corpus Christi	25,000
Shell Oil Co., Deer Park	285,000
South Hampton Co., Silsbee	18,100
Southwestern Refining Co., Corpus Christi	104,000
Texaco Inc., Port Arthur	402,000
Port Neches	31,000
Texas City Refining, Inc., Texas City	86,450
	*33,120
Texas Independent Corp. (formerly Uni Refining, Inc.), Ingleside	*30,000
Tipperary Refining Co., Ingleside	7,320
Union Oil Co. of California, Nederland	120,000
Total	**3,730,744**
	*703,670

Utah

Company	b/d
Amoco Oil Co., Salt Lake City	39,000

Company	b/d
Caribou-Four Corners Oil Co., Woods Cross	3,000 *4,200
Chevron U.S.A., Salt Lake City	45,000
Husky Oil Co., North Salt Lake	25,000
Morrison Petroleum Co., Woods Cross	6,300
Phillips Petroleum Co., Woods Cross	24,000
Plateau, Inc., Roosevelt	7,500
Western Refining Co., Woods Cross	12,500
Total	**162,300** ***4,200**
Virginia	
Amoco Oil Co., Yorktown	53,000
Total	**53,000**
Washington	
Atlantic Richfield Co., Ferndale	115,000
Chevron U.S.A., Richmond Beach	5,500
Crysen Corp. (formerly Sound Refining, Inc.), Tacoma	6,000
Mobil Oil Corp., Ferndale	71,500
Shell Oil Co., Anacortes	91,000
Texaco Inc., Anacortes	78,000
U.S. Oil & Refining Co., Tacoma	20,000
United Independent Oil Co., Tacoma	*730
Total	**387,000** ***730**

Company	b/d
West Virginia	
Elk Refining Co., a Div. of Pennzoil Co., Falling Rock	5,600
Quaker State Oil Refining Corp., Newell	11,700
St. Mary's	4,800
Total	**22,100**
Wisconsin	
Murphy Oil Corp., Superior	39,000
Total	**39,000**
Wyoming	
Amoco Oil Co., Casper	48,000
C & H Refinery, Inc., Lusk	*180
Glacier Park Co., Osage	*10,000
Husky Oil Co., Cheyenne	28,000
Cody	11,500
Little America Refining Co., Casper	24,500
Sinclair	60,000 *10,000
Mountaineer Refining Co. Inc., La Barge	700
Sage Creek Refining Co., Inc., Cowley	1,000
Silver Eagle Refining Co., La Barge	1,500
Texaco Inc., Casper	21,000
Wyoming Refining Co., Newcastle	12,555
Total	**209,555** ***20,180**

Company	b/d
Hawaiian Foreign Trade Zone	
Hawaiian Independent Refinery, Inc., Ewa Beach	67,900
Total	**67,900**
Puerto Rico	
Commonwealth Oil Refining Co., Penuelas	60,454 *63,041
Gulf Oil Corp., Bayamon	36,000
Peerless Petrochemicals Inc., Ponce	*10,000
Phillips Puerto Rico Core, Inc., (b) Guayama	—
Sun Co., Yabucoa	86,000
Total	**182,454** ***73,041**
Virgin Islands	
Amerada Hess Corp., St. Croix	585,000
Total	**585,000**
Guam	
Guam Oil & Refining Corp., Agana	43,900
Total	**43,900**

*Capacity shut down but capable of being placed in operation within 90 days; (a) Although these refineries are normally shut down on Jan. 1, they are operated at or near capacity during the asphalt paving season; (b) Not included with refineries in the U.S. because they are located in foreign trade zones.

Source: Department of Energy, Energy Information Administration, Petroleum Supply Annual, 1982.

Lubricating Oil and Wax Capacities of U.S. Refineries

(All capacities in 000 b/d as of Jan. 1, 1983)

			Finished Lube Capacity					Wax Capacity	
Company	Location	Crude Capacity	A	B	C	D	Total	E	F
Allied Materials Corp.	Stroud, Okla.	8.0	0.8				0.8		0.2
Amoco Oil Co.	Casper, Wyo.	48.0	1.5		0.1		1.6	0.2	0.2
Amoco Oil Co.	Whiting, Ind.	376.0	6.2				6.2	0.6	
Ashland Oil, Inc.	Catlettsburg, Ky.	220.0	7.9				7.9		2.0
Ashland Oil, Inc.	Freedom, Pa.	6.5							
Atlantic Richfield Co.	Houston, Tex.	232.0	4.4			2.0	6.4	0.4	0.4
Calumet Refining Co.	Burnham, Ill.	0.0				0.6	0.6		
Calumet Refining Co.	Princeton, La.	4.4				3.2	3.2		
Chevron U.S.A. Inc.	Richmond, Calif.	365.0	3.0	2.3			5.3	1.2	1.0
Cit-Con Oil Corp.	Lake Charles, La.		10.0				10.0	1.0	0.8
Conoco Inc.	Ponca City, Okla.	134.0	2.0				2.0	0.2	
Cross Oil & Refining, Inc.	Smackover, Ark.	9.8				4.0	4.0		
Diamond Shamrock Corp.	Three Rivers, Tex.	2.0				2.0	2.0		
Exxon Co., U.S.A	Baton Rouge, La.	455.0	13.8		2.7		16.5	1.5	
Exxon Co., U.S.A	Baytown, Tex.	494.0	16.1	9.0		6.7	31.8		1.7
Farmland Industries, Inc.	Coffeyville, Kans.	56.5	2.5				2.5	0.2	
Gulf Refining and Marketing Co.	Port Arthur, Tex.	412.7	6.6	0.5	1.4	1.6	10.1		0.4
Lubrication Co. of America	Saugus, Calif.			0.5			0.5		
Macmillan Petroleum, Inc.	Norphlet, Ark.	6.0				2.2	2.2		
Mobil Oil Corp.	Beaumont, Tex.	325.0	9.2				9.2	1.3	0.3
Mobil Oil Corp.	Paulsboro, N.J.	99.7	7.1				7.1		0.3
Pennzoil Co.	Falling Rock, W. Va.	0.0			0.0		0.0	0.0	0.0
Pennzoil Co.	Rouseville, Pa.	15.7			4.4		4.4	0.6	0.4
Pennzoil Co., Atlas Processing Co.	Shreveport, La.	76.5	3.6		1.4	2.7	7.7	1.0	
Petrolite Corp.	Barnsdall, Okla.							0.4	
Petrolite Corp., Bareco Div.	Kilgore, Tex.	1.0							0.3
Phillips Petroleum Co.	Kansas City, Kans.	0.0	0.0				0.0		0.0
Quaker State Oil Ref. Corp.	Emlenton, Pa.							0.7	
Quaker State Oil Ref. Corp.	Farmers Valley, Pa.	6.5	2.5				2.5	0.4	0.5
Quaker State Ref. Corp.	Newell, W. Va.	11.7			3.6		3.6		0.8
Quaker State Oil Ref. Corp.	St. Mary's, W. Va.	4.9	1.6				1.6		0.3
Shell Oil Co.	Deer Park, Tex.	285.0	4.5			4.4	8.9	1.2	
Shell Oil Co.	Martinez, Calif.	91.4		3.5		0.3	3.8		
Shell Oil Co.	Wood River, Ill.	283.0	5.0				5.0		0.7
Standard Oil Co. (Ohio)	Lima, Ohio	168.0	2.0		0.4		2.4		
Sun Co., Inc.	Marcus Hook, Pa.	155.0	5.5			10.5	16.0	1.0	
Sun Co., Inc.	Tulsa, Okla.	85.0	7.8				7.8	0.8	
Sun Co., Inc.	Yabucoa, Puerto Rico	85.0	6.5				6.5		1.7
Texaco U.S.A	Port Arthur, Tex.	402.0	12.0	0.6	3.4	4.0	20.0	0.1	1.8
Union Oil Co. of Calif.	Nederland, Tex.	120.0	2.9				2.9	0.1	0.2
Union Oil Co. of Calif.	Rodeo, Calif.	70.0	4.0				4.0	0.6	1.5
Witco Chemical Corp.	Bradford, Pa.	7.6	1.6		0.9		2.5	0.2	
Witco Chemical Corp.	Oildale, Calif.	11.0		2.4		1.9	4.3		
	TOTAL:	5133.9	150.6	18.8	18.3	46.1	233.8	13.7	15.5

Canadian Refineries

Company	Location	Crude Capacity	A	B	C	D	Total	E	F
Gulf Canada Ltd.	Clarkson, Ontario	76.6	4.6				4.6		1.0
Imperial Oil Enterprises Ltd.	Sarnia, Ontario	126.0	5.1	0.7			5.8	0.6	1.6
Imperial Oil Enterprises Ltd.	Strathcona, Alberta	150.0	2.9				2.9		1.1
International Waxes, Ltd.	Agincourt, Ontario							0.8	
Shell Canada Ltd.	Montreal East, Quebec	31.0	3.4				3.4		1.0
	TOTAL:	383.6	16.0	0.7	0.0	0.0	16.7	1.4	4.7

Definitions: A—Solvent extracted paraffinic stocks; B—Solvent extracted naphthenic stocks; C—Unextracted paraffinic stocks; D—Unextracted naphthenic stocks; E—Fully refined, crude scale, and micro waxes; F—Semi-finished, slack waxes and petrolatums.

Source: National Petroleum Refiners Assn., Lubricating Oil and Wax Capacities, 1983.

U.S. Refinery Closings in 1981-1982

Excess crude oil supplies the world over and declining gasoline and fuel oil consumption at home and abroad sounded the death knell for many refineries in the United States.

The U.S. Department of Energy, in separate reports, said 57 refineries with more than 1.1-million b/d of crude distillation capacity were shut down in 1982 alone. In addition, the government said, another 1.5-million b/d of refinery capacity was reported as idle but capable of being brought back into production within 90 days.

The refinery closings in 1982 and the large reductions in capacity continued the trend started in 1981. During that year, the government said, 23 refineries with 451,000 b/d of crude distillation capacity were closed and another 260,000 b/d of capacity were mothballed.

The shutdowns, almost incredible in their own way, ended an uninterrupted trend in refinery capacity expansion that began way back in 1967.

Oddly, about 40% of the refineries that were shut down in 1982 were 25 years or more old while another 40% were less than five years old. More than half of the shutdowns had capacities of less than 10,000 b/d while 90% of them were under 50,000 b/d.

The end is nowhere in sight. The year 1983 had hardly gotten underway when more refinery closings were announced, among them Chevron's 168,000 b/d unit at Perth Amboy, N.J., and Ashland Oil's 26,000 b/d plant at Lexington, Ky.

The government countdown for the last two years follows below.

Shutdowns in 1982

PAD District/Refinery	b/d
East Coast	
Amoco Oil Co., Baltimore, Md.	15,000
Ashland Oil, Buffalo, N.Y.	64,000
Seminole Refining, St. Marks, Fla.	15,000
Total	**94,000**
Midwest	
Amoco Oil Co., Sugar Creek, Mo.	104,000
Ashland Oil, Findlay, Ohio	20,400
CRA, Scottsbluff, Neb.	5,600
CRA, Phillipsburg, Kan.	26,400
Dillman Oil Recovery, Oblong, Ill.	1,200
E-Z Serv Refining, Shallow Water, Kans.	9,500
Energy Cooperative, East Chicago, Ind.	126,000
Industrial Fuel & Asphalt of Indiana, Hammond, Ind.	7,600
Kentucky Oil & Refining Co., Betsy Lane, Ky.	3,000
Mid-America Refining Co., Chanute, Kan.	3,000
Northland Oil & Refining Co., Dickinson, N.D.	5,000
Phillips Petroleum Co., Kansas City, Kan.	80,000
Texaco, West Tulsa, Okla.	50,000
Texas America Petrochemicals, West Branch, Mich.	11,500
Total	**453,200**
Gulf Coast	
Bayou State Oil Corp., Hosston, La.	3,000
Bronco Refining Co., Houston, Tex.	2,250
Caribou-Four Corners Oil Co., Kirtland, N.M.	2,400
Clinton Manges, Palestine, Tex.	6,000
Copano Refining Co., Ingleside, Tex.	11,100
Dow Chemical U.S.A., Freeport, Tex.	190,000
Eagle Refining Corp., Jacksboro, Tex.	1,800
Giant Industries, Farmington, N.M.	13,500
Independent Refining Corp., Pt. Neches, Tex.	30,000
Independent Refining Corp., Winnie, Tex.	50,000
Lake Charles Refining Co., Lake Charles, La.	28,000
Listo Refining Co., Donna, Tex.	3,500
Longview Refining Co., Longview, Tex.	14,000
Natchez Refining Co., Natchez, Miss.	16,000
Petraco-Valley Oil & Refining Co., Brownsville, Tex.	12,300
Placid Oil Co., Mont Belvieu, Tex.	8,500
Quitman Refining Co., Quitman, Tex.	6,600
Rio Grande Crude Refining, Brownsville, Tex.	9,500
Rio Grande Recovery Systems, Brownsville, Tex.	1,000
Schulze Processing, Tallulah, La.	1,760
Sentry Refining, Corpus Christi, Tex.	25,000
Shepard Oil Co., Jennings, La.	10,000
Sooner Refining Co., Darrow, La.	8,000
T & S Refining, Jennings, La.	10,500
TARCO, Euless, Tex.	6,000
Tipperary Refining Co., Wickett, Tex.	7,320
Vicksburg Refining Co., Vicksburg, Miss.	7,900
Wickett Refining Co., Wickett, Tex.	8,000
Total	**493,930**
Rocky Mountain	
C & H Refinery, Lusk, Wyo.	180
Caribou-Four Corners Oil Co., Woods Cross, Utah	7,200
Glacier Park Co., Osage, Wyo.	10,000
Husky Oil Co., Cody, Wyo.	11,500
Morrison Petroleum Co., Woods Cross, Utah	6,300
Sage Creek Refining Co., Cowley, Wyo.	1,000
Texaco, Casper, Wyo.	21,000
Total	**57,180**
West Coast	
Gibson Oil & Refining Co., Bakersfield, Calif.	4,600
Lunday-Thagard Oil Co., South Gate, Calif.	12,000
Sabre Oil & Refining, Bakersfield, Calif.	10,000
United Independent Oil Co., Tacoma, Wash.	730
West Coast Oil Co., Oildale, Calif.	21,000
Total	**48,330**
U.S. Total for 1982	**1,146,640**

Shutdowns in 1981

PAD District/Refinery	b/d
East Coast	
ATC Petroleum, Wilmington, N.C.	11,900
ATC Petroleum, Newington, N.H.	13,400
Manatee Energy Co., Port Manatee, Fla.	28,400
Mobil Oil Corp., Buffalo, N.Y.	43,000
Total	**96,700**
Midwest	
Amoco Oil Co., Wood River, Ill.	104,000
Conoco Inc., Wrenshall, Minn.	23,500
Dow Chemical U.S.A., Bay City, Mich.	20,000
Energy Development, Crossville, Ill.	1,000
Gulf Oil Corp., Toledo, Ohio	50,300
Kentucky Oil and Refining Co., Troy, Ind.	1,500
Texaco, Lockport, Ill.	72,000
Wireback Oil Co., Plymouth, Ill.	1,800
Total	**274,100**
Gulf Coast	
Adobe Refining Co., La Blanca, Tex.	5,200
Carbonit Refinery, Hearne, Tex.	11,000
Gulf Oil Corp., Venice, La.	28,700
Southern Union Refining Co., Monument, N.M.	5,400
Southland Oil Co., Yazoo City, Miss.	5,500
Texas Refining Co., Midland, Tex.	2,500
Texas Standard Refining, Houston, Tex.	1,800
Total	**60,100**
Rocky Mountain	
Glenrock Refinery, Glenrock, Wyo.	6,000
Southwestern Refining Co., La Barge, Wyo.	1,040
Total	**7,040**
West Coast	
Quad Refining Corp., Bakersfield, Calif.	7,000
Road Oil Sales, Bakersfield, Calif.	6,000
Total	**13,000**
U.S. Total for 1981	**450,940**

Source: Department of Energy, Petroleum Supply Annual for 1981; Petroleum Supply Monthly, February, 1983, for 1982.

U.S. Refineries and Capacities by Companies

(In Descending Order as of Jan. 1, 1982)

Important Note: This listing by companies includes capacity that is operating and capacity that is shut down, i.e., in the latter case, capacity that can be restored to active operations in 90 days or less. Energy Information Administration says 23 refineries, with an operating capacity of 450,940 b/d, were shut down permanently in calendar year 1982. EIA says that on Jan. 1, 1982, there were 175 companies with 301 refineries and 17,889,734 b/d of capacity (including shut down capacity).

Companies controlling more than 100,000 b/d of crude oil capacity:
No. of companies: 32; No. of refineries: 131; Total capacity: 14,941,876 b/d.

Company	b/d
Exxon Corp.	
Exxon Co. U.S.A.	
Baytown, TX	640,000
Baton Rouge, LA	493,000
Linden, NJ	265,000
Benicia, CA	106,000
Billings, MT	45,000
Total	1,549,000
Standard Oil Co. of California	
Chevron U.S.A.	
El Segundo, CA	405,000
Richmond, CA	365,000
Pascagoula, MS	280,000
Perth Amboy, NJ	168,000
El Paso, TX	76,000
Honolulu, HI	48,000
Salt Lake City, UT	45,000
Bakersfield, CA	26,000
Kenai, AK	22,000
Willbridge, OR	15,000
Baltimore, MD	14,200
Richmond Beach, WA	5,500
Total	1,469,700
Shell Oil Co.	
Deer Park, TX	285,000
Wood River, IL	283,000
Norco, LA	257,000
Martinez, CA	104,000
Wilmington, CA	93,000
Anacortes, WA	91,000
Odessa, TX	30,600
Gallup, NM	18,000
Total	1,161,600
Standard Oil Co. of Indiana	
Amoco Oil Co.	
Texas City, TX	415,000
Whiting, IN	380,000
Sugar Creek, MD	104,000
Mandan, ND	56,000
Yorktown, VA	53,000
Casper, WY	48,000
Salt Lake City, UT	39,000
Savannah, GA	24,000
Baltimore, MD	15,000
Total	1,134,000
Texaco Inc.	
Port Arthur, TX	402,000
Convent, LA	140,000
Westville, NJ	90,000
Lawrenceville, IL	84,000
Anacortes, WA	78,000
Wilmington, CA	75,000
West Tulsa, OK	50,000
Port Neches, TX	31,000
Casper, WY	21,000
Amarillo, TX	20,000
El Paso, TX	17,000
Total	1,008,000
Mobil Oil Corp.	
Beaumont, TX	335,000
Joliet, IL	180,000
Torrance, CA	123,500
Paulsboro, NJ	99,700
Ferndale, WA	71,500
Augusta, KS	50,000
Total	859,700
Gulf Oil Corp.	
Port Arthur, TX	335,000
Belle Chasse, LA	198,900
Philadelphia, PA	174,100
Santa Fe Springs, CA	51,500
Cleves, OH	43,700
Total	803,200
Atlantic Richfield Co.	
Houston, TX	222,000
Carson, CA	166,000
Philadelphia, PA	125,000
Ferndale, WA	115,000
North Slope, AK	14,200
Total	642,200
Marathon Oil Co.	
Garyville, LA	255,000
Robinson, IL	195,000
Texas City, TX	69,500
Detroit, MI	68,500
Total	588,000
Union Oil Co. of California	
Lemont, IL	151,000
Beaumont, TX	120,000
Wilmington, CA	108,000
Rodeo, CA	70,000
Arroyo Grande, CA	41,000
Total	490,000
DuPont Holdings, Inc.	
Conoco Inc.	
Alvin/Texas City, TX	37,194
West Lake, LA	156,500
Ponca City, OK	133,700
Billings, MT	52,500
Paramount, CA	46,500
Denver, CO	32,500
Santa Maria, CA	9,500
Egan, LA	6,500
Total	474,894
Ashland Oil	
St. Paul Park, MN	67,143
Louisville, KY	25,200
Freedom, PA	6,800
Catlettsburg, KY	213,400
Canton, OH	66,000
Buffalo, NY	64,000
Findlay, OH	20,400
Total	462,943
Standard Oil Co. of Ohio	
Lima, OH	168,000
Toledo, OH	120,000
BP Oil Corp.	
Marcus Hook, PA	164,000
Total	452,000
Sun Co.	
Marcus Hook, PA	165,000
Toledo, OH	125,000
Tulsa, OK	88,500
Total	378,500
Phillips Petroleum Co.	
Sweeny, TX	175,000
Borger, TX	95,000
Kansas City, KS	80,000
Woods Cross, UT	24,000
Total	374,000
Cities Service Co.	
Lake Charles, LA	320,000
Union Pacific Corp.	
Champlin Petroleum Co.	
Corpus Christi, TX	170,000
Wilmington, CA	60,000
Enid, OK	53,800
Total	283,800
Getty Oil Co.	
Getty Refining & Marketing Co.	
Delaware City, DE	140,000
El Dorado, KS	80,577
Bakersfield, CA	60,000
Total	280,577
Coastal Corp.	
Coastal States Petroleum Co.	
Corpus Christi, TX	161,000
Pacific Refining Co.	
Hercules, CA	85,000
Derby Refining Co.	
North Wichita, KS	27,982
Total	273,982
Tosco Corp.	
Avon, CA	126,000
Duncan, OK	47,000
El Dorado, AR	47,000
Bakersfield, CA	39,500
Total	259,500
Dow Chemical Co.	
Dow Chemical U.S.A.	
Freeport, TX	190,000
Koch Industries	
Koch Refining Co.	
Corpus Christi, TX	57,000
Rosemont, MN	127,300
Total	184,300
Kerr-McGee Corp.	
Wynnewood, OK	43,000
Dubach, LA	10,780
Southwestern Refining Co.	
Corpus Christi, TX	104,000
Cotton Valley Solvents Co.	
Cotton Valley, LA	7,800
Total	165,580
Apex Oil Co.	
Clark Oil & Refining Corp.	
Blue Island, IL	66,500
Hartford, IL	63,600
Mt. Airy, LA	23,000
Total	153,100
American Petrofina Co. of Texas	
Port Arthur, TX	90,000
Big Spring, TX	60,000
Total	150,000
Total Petroleum	
Ardmore, OK	62,000
Arkansas City, KS	42,500
Alma, MI	40,000
Total	144,500
Murphy Oil Corp.	
Meraux, LA	90,200
Superior, WI	39,000
Total	129,200
Energy Cooperative	
East Chicago, IN	126,000
Agway Petroleum Corp.	
Texas City Refining	
Texas City, TX	119,600

Company	b/d
Tonneco Oil Co.	
Chalmette, LA	114,000
Crown Central Petroleum Corp.	
Pasadena, TX	100,000
GHR Energy Corp.	
Good Hope, LA	100,000

Companies controlling 30,000 b/d to 99,999 b/d.

No. of companies: 31; No. of refineries: 44; Total capacity: 1,654,093 b/d.

Company	b/d
Amerada Hess Corp.	
Port Reading, NJ	68,000
Purvis, MS	30,000
Total	98,000
Earth Resources Co.	
Delta Refining Co.	
Memphis, TN	49,500
Earth Resources Co. of Alaska	
North Pole, AK	45,323
Total	94,823
Little America Refining Co.	
Sinclair, WY	70,000
Casper, WY	24,500
Total	94,500
Farmland Industries	
CRA, Inc.	
Coffeyville, KS	56,500
Phillipsburg, KS	26,400
Scotts Bluff, NE	5,600
Total	88,500
Independent Refining Corp.	
Winnie, TX	50,000
Port Neches, TX	30,000
Total	80,000
Tesoro Petroleum Corp.	
Carrizo Springs, TX	26,100
Tesoro-Alaskan Petroleum Corp.	
Kenai, AK	48,500
Total	74,600
Diamond Shamrock Corp.	
Sunray, TX	71,100
Husky Oil Co.	
Cheyenne, WY	28,800
Cody, WY	11,500
North Salt Lake, UT	25,000
Total	65,300
Pennzoil Co.	
Rouseville, PA	14,600
Atlas Processing Co.	
Shreveport, LA	45,000
Elk Refining Co.	
Falling Rock, WV	5,600
Total	65,200
Charter Oil Co.	
Charter International Oil Co.	
Houston, TX	65,000
Goldking Refining Ltd.	
Hill Petroleum Co.	
Krotz Springs, LA	57,400
National Cooperative Refinery Assn.	
McPherson, KS	54,000
Coral Petroleum	
Warren, PA	41,000
Tuscaloosa, AL	10,500
Total	51,500
Placid Oil Co.	
Placid Refining Co.	
Port Allen, LA	40,000
Mont Belvieu, TX	8,500
Total	48,500
Texas Eastern Transmission Corp.	
La Gloria Oil & Gas Co.	
Tyler, TX	46,000
Seaview Petroleum Co.	
Paulsboro, NJ	44,400
Powerine Oil Co.	
Santa Fe Springs, CA	44,120
Rock Island Refining Corp.	
Indianapolis, IN	43,200
Penn Central Corp.	
Edgington Oil Co.	
Long Beach, CA	41,600
Farmers Union Central Exchange	
Laurel, MT	41,450
Louisiana Land & Exploration Co.	
Mobile, AL	41,300
Asamera Oil (U.S.)	
Commerce City, CO	38,800
Gulf States Oil & Refining Co.	
Corpus Christi, TX	38,000
Southern Union Co.	
Southern Union Refining Co.	
Lovington, NM	36,100
Pester Corp.	
Pester Refining Co.	
El Dorado, KS	35,000
Cirillo Brothers Oil Co.	
Cibro Petroleum Products	
Albany, NY	33,900
Hunt Oil Co.	
Tuscaloosa, AL	33,500
Quintana Petrochemical Co.	
Corpus Christi, TX	33,300
Pride Refining	
Abilene, TX	33,000
Sigmor Corp.	
Sigmor Refining Co.	
Three Rivers, TX	32,000
Texas Independent Corp.	
Ingleside, TX	30,000

Companies controlling from 10,000 b/d to 29,999 b/d of crude oil capacity:

No. of companies: 60; No. of refineries: 70; Total capacity: 1,046,271 b/d.

Company	b/d
Holly Corp.	
Navajo Refining Co.	
Artesia, NM	29,930
E-Z Serv Inc.	
Fort Worth, TX	20,000
Shallow Water, KS	9,500
Total	29,500
International Processors	
St. Rose, LA	28,600
Aweco	
Lake Charles Refining Co.	
Lake Charles, LA	28,000
Mobile Bay Refining Co.	
Chickasaw, AL	26,600
Oklahoma Refining Co.	
Thomas, OK	10,700
Cyril, OK	15,600
Total	26,300
Marion Corp.	
Theodore, AL	25,500
Okmulgee Refining Co.	
Okmulgee, OK	25,000
Sentry Refining	
Corpus Christi, TX	25,000
Fletcher Oil & Refining Co.	
Carson, CA	24,575
Suburban Propane Gas Corp.	
Plateau Inc.	
Bloomfield, NM	16,800
Roosevelt, UT	7,500
Total	24,300
Dorchester Gas Corp.	
Dorchester Refining Co.	
Mount Pleasant, TX	24,000
U.S.A. Petrochem Corp.	
Ventura, TX	24,000
Quaker State Oil Refining Corp.	
Newell, WV	11,700
Smethport, PA	6,700
St. Mary's, WV	4,800
Total	23,200
Marlex Petroleum	
Marlex Oil & Refining	
Long Beach, CA	22,000
Kern County Refinery	
Bakersfield, CA	21,400
Indiana Farm Bureau Cooperative Assn.	
Mount Vernon, IN	21,200
West Coast Oil Co.	
Oildale, CA	21,000
Ergon Refining Inc.	
Vicksburg, MS	20,600
Texas NAPCO Inc.	
La Jet Inc.	
St. James, LA	20,000
Time Oil Co.	
U.S. Oil & Refining Co.	
Tacoma, WA	20,000
McTan Corp.	
St. James, LA	19,300
Hudson Oil Co.	
Hudson Refining Co.	
Cushing, OK	19,000
Saber Energy	
Saber Refining Co.	
Corpus Christi, TX	19,000
Texas Oil & Chemical Co.	
South Hampton Refining Co.	
Silsbee, TX	18,100
Tomlinson Refining	
Pioneer Refining Ltd.	
Nixon, TX	18,000
Newhall Refining Co.	
Newhall, CA	17,600
American Ultramar Ltd.	
Hanford, CA	17,300
Crystal Oil Co.	
Longview Refining Co.	
Longview, TX	14,000
Berry Petroleum Co.	
Stephens, AK	3,300
Total	17,300
World Oil Co.	
Sunland Refining Corp.	
Bakersfield, CA	17,000
V G S Corp.	
Southland Oil Co.	
Sandersville, MS	11,000
Lumberton, MS	5,800
Total	16,800
MacMillan Ring-Free Oil Co.	
Long Beach, CA	12,200
Norphlet, AK	4,400
Total	16,600

Company	b/d
Ultramar Co. Ltd.	
Golden Eagle Refining Co.	
Carson, CA	16,170
Mid-Continent Systems	
Natchez Refining Co.	
Natchez, MS	16,000
Gladieux Refining	
Fort Wayne, IN	15,800
Seminole Oil Co.	
Seminole Refining	
St. Marks, FL	15,000
Witco Chemical Corp.	
Oildale, CA	8,000
Bradford, PA	6,841
Total	14,841
CPI Oil and Refining	
Lake Charles, LA	14,000
Central Louisiana Energy	
Slapco	
Mermentau, LA	13,500
Giant Industries	
Farmington, NM	13,500
Gary Energy Co.	
Gary Refining Co.	
Fruita, CO	13,100
Hermes Products Co.	
Wyoming Refining Co.	
Newcastle, WY	12,555
Brio Refining	
Friendswood, TX	12,500
Western Refining Co.	
Woods Cross, UT	12,500
Petraco-Valley Oil & Refining Co.	
Brownsville, TX	12,300
Thagard Oil Co.	
Lunday-Thagard Oil Co.	
South Gate, CA	12,000
Texas American Oil	
Texas American Petrochemical	
West Branch, MI	11,500
Copano Refining Co.	
Ingleside, TX	11,100
Marley	
ECO Petroleum	
Long Beach, CA	11,000
Tonkawa Refining Co.	
Arnett, OK	11,000
T & S Refining	
Jennings, LA	10,500
Vedette Energy	
Rio Grande Crude Refining	
Brownsville, TX	9,500
Rio Grande Recovery Systems	
Brownsville, TX	1,000
Total	10,500
Coastal Petroleum Co.	
Paloma, CA	10,200
Burlington Northern	
Glacier Park Co.	
Osage, WY	10,000
Demenno-Kerdoon Resources	
Compton, CA	10,000
Mitchell Energy & Development	
Liquid Energy Corp.	
Bridgeport, TX	10,000
Sabre Refining	
Bakersfield, CA	10,000
San Joaquin Refining Co.	
Oildale, CA	10,000

Company	b/d
Shepard Oil	
Jennings, LA	10,000
Sierra Anchor/Sierra Energy Assn.	
Anchor Refining Co.	
McKittrick, CA	10,000

Companies controlling 9,999 b/d or less crude oil capacity: **No. of companies: 52; No. of refineries: 56; Total capacity: 247,494 b/d.**

Company	b/d
Caribou-Four Corners Oil Co.	
Woods Cross, UT	7,200
Farmington, NM	2,400
Total	9,600
Moore & Munger	
Cross Oil & Refining Co. of Arkansas	
Smackover, AK	9,500
Flying J	
Cutbank, MT	4,400
Williston, ND	4,250
Total	8,650
Lakeside Refining Co.	
Kalamazoo, MI	5,600
Crystal Refining Co.	
Carson City, MI	3,000
Total	8,600
Southern Independent Oil & Refining	
Laketon Asphalt Refining Co.	
Laketon, IN	8,500
Adobe Oil & Gas Co.	
Wickett Refining Co.	
Wickett, TX	8,000
Canal Refining Co.	
Church Point, LA	8,000
Sooner Refining Co.	
Darrow, LA	8,000
Vicksburg Refining	
Vicksburg, MS	7,900
Industrial Fuel & Asphalt Co.	
Industrial Fuel & Asphalt of Indiana	
Hammond, IN	7,600
Mallard Resources	
Gueydan, LA	7,400
Tipperary Corp.	
Tipperary Refining Co.	
Ingleside, TX	7,320
Allied Materials Corp.	
Stroud, OK	7,200
Quitman Refining Co.	
Quitman, TX	6,600
Claiborne Gasoline Co.	
Lisbon, LA	6,500
Morrison Petroleum Co.	
Woods Cross, UT	6,300
Clinton Manges Oil & Refining Co.	
Palestine, TX	6,000
Crysen Corp.	
Tacoma, WA	6,000
Simmons Oil Co.	
Great Falls, MT	6,000
Texas Armada Refining Co.	
TARCO	
Euless, TX	6,000
Calumet Industries	
Calumet Refining Co.	
Princeton, LA	5,531
Somerset Refining	
Somerset, KY	5,500

Company	b/d
Warrior Asphalt Co. of Alabama	
Holt, AL	5,500
Huntway Refining Co.	
Wilmington, CA	5,400
Northland Oil & Refining Co.	
Dickinson, ND	5,000
Young Refining Corp.	
Douglasville, GA	5,000
Kenco Refining	
Wolf Point, MT	4,700
Gibson Oil & Refining Co.	
Bakersfield, CA	4,600
Evangeline Refining Co.	
Jennings, LA	4,500
Howell Corp.	
Howell Hydrocarbons	
San Antonio, TX	4,500
Nevada Refining Co.	
Tonopah, NV	4,180
Arizona Fuels Corp.	
Fredonia, AZ	4,015
Oxnard Refinery	
Oxnard, CA	4,000
Listo Petroleum Co.	
Donna, TX	3,500
Eddy Refining Co.	
Houston, TX	3,250
Port Petroleum	
Stonewall, LA	3,200
Bayou State Oil Corp.	
Hosston, LA	3,000
Kentucky Oil & Refining Co.	
Betsy Lane, KY	3,000
Mid-America Refining Co.	
Chanute, KS	3,000
Thriftway Co.	
Bloomfield, NM	1,194
Graham, TX	1,184
Total	2,378
Bronco Refining Co.	
Houston, TX	2,250
Eagle Refining Corp.	
Jacksboro, TX	1,800
Schulze Processing	
Tallulah, LA	1,760
Flint Ink Corp.	
Flint Chemical Co.	
San Antonio, TX	1,500
Silver Eagle Refining Co.	
La Barge, WY	1,500
Dillman Oil Recovery	
Oblong, IL	1,200
Petrolite Corp.	
Kilgore, TX	1,000
Sage Creek Refining Co.	
Cowley, WY	1,000
United Independent Oil Co.	
Tacoma, WA	730
Mountaineer Refining Co.	
La Barge, WY	700
Shore Inc.	
Kilgore, TX	450
C & H Refinery	
Lusk, WY	180

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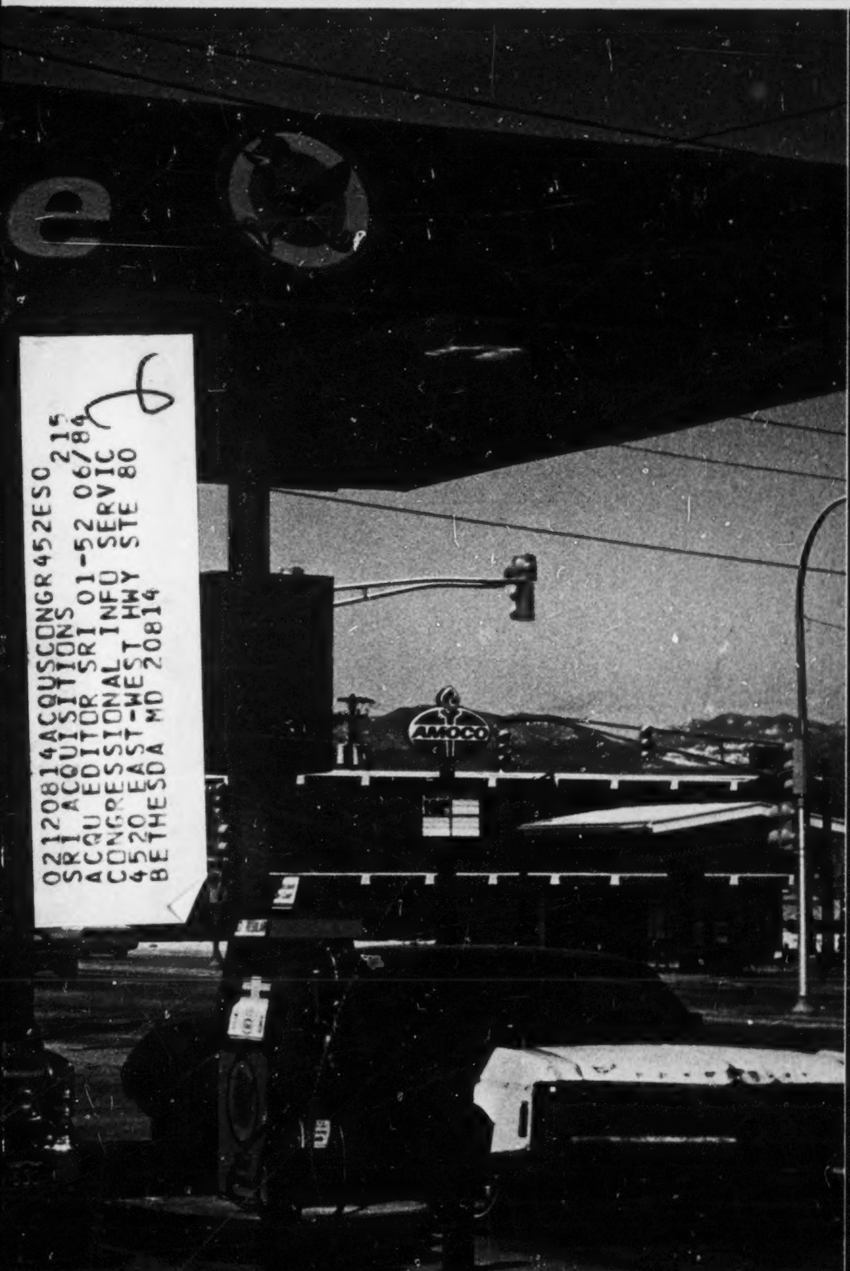

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Who Is Winning In Denver?

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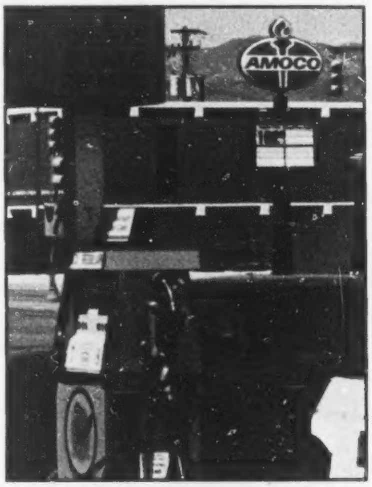

Denver has been called the toughest "non-water" market in the U.S., swinging back and forth over the years between majors and independents. These days, the majors' onslaught is led by Amoco, while a host of rugged indies also vie to be king of the mountain marketplace. **Page 38.**
Cover photograph by Thomas Olson.

Bill Englefield's company has prospered during de-control, survived slim margins and squeezed a profit from a shrinking gasoline market . . . but not without a strategy. **Page 44.**

A gasoline purchase is not one of the world's most complicated transactions, but as electronics, computers, banks and systems analysts get into the act, it can sound like it is. **Page 48.**